The Journal of the American Medical Association

Published Under the Auspices of the Board of Trustees

VOL. 103, No. 26 CHICAGO, ILLINOIS DECEMBER 29, 1934

LUNG ABSCESS

CHAIRMAN'S ADDRESS

HAROLD BRUNN, M.D.

SAN FRANCISCO

In searching about for a subject that might be of interest, several things conspired to influence me in the choice of lung abscess. Any disease that has a mortality as high as this is a proper subject for consideration before this section. Of equal importance but less emphasized is the long period of disability and hospitalization, thus bringing about serious social and economic problems. Because this disease is not a very common one, because it is usually treated in the first instance by the family physician who has had no considerable experience with it, and because it is difficult from the literature to evaluate any particular form of treatment, I feel that a discussion of this disease may be of value.

It might at this point be interesting to relate that several years ago in the San Francisco Bay region a little group was formed, composed mostly of thoracic surgeons with a sprinkling of especially selected medical men. We formed ourselves into a dinner club. After a number of interesting meetings, the group finally split up on the subject of lung abscess. But we came to some interesting conclusions, which were that we knew but little about this disease in its clinical aspects, that the criteria which we had used were not built on fact, that to prognosticate the course of any individual case was fraught with difficulty, and that we could obtain arguments through the literature for any kind of procedure that we might wish to use.

With this previous experience it is therefore with some temerity that I appear before you, and I presume to do so only because a chairman's address permits of no discussion.

As a result of this experience, a rather intensive review was made of 128 cases from the records of the University of California Hospital, the Mount Zion Hospital, and the University of California service at the San Francisco Hospital. Through the courtesy of Dr. Leo Eloesser it was possible to add seventy-seven cases from the Stanford service at the San Francisco Hospital, making a total of 205 cases. When I started, I had certain preconceived ideas that I wished to prove. When I finished, I reached conclusions that were diametrically opposite. This study was carried on by a group composing the Thoracic Clinic of the University of California. They will report in the future, in detail, many of the points touched on in this paper which cannot be given full consideration here.

The cases were handled by a number of different men, some better trained than others in this special field; but the series does, perhaps, give a cross-section of the treatment and results in hospitals throughout the country. It is worthy of note that the seventy-seven cases from the Stanford service treated by Dr. Eloesser and his staff gave practically the same values as were obtained from the three hospitals mentioned.

Perhaps the subject might best be approached through a series of questions: Does the trouble in the handling of this disease lie in difficulty of diagnosis and early action on such diagnosis, as is the case with many acute surgical conditions? Are the diagnostic means at one's disposal always accurate, and does one lean at times too heavily on them? Is the complexity of the disease recognized and are insufficient data from a few cases too readily drawn on? Are medical practitioners carried away by any particular form of treatment and do they apply the various forms of treatment recommended, both medical and surgical, either at the wrong time or in the wrong case? Should cases be treated medically for a longer period or should surgical intervention come earlier in the course of the disease? Are there any criteria for the time of surgical intervention? Is there a possibility of improving surgical methods? If these questions have remained unanswered in the past, what are we, as surgeons, going to do about it?

I am limiting the scope of this paper to that type which had its beginning, at least, as an acute putrid abscess—foul smelling, containing elastic tissue, usually aspiratory in origin, and containing a multiplicity of bacteria, both anaerobic and aerobic; excluding bronchiectasis, abscesses on a carcinoma basis, and those produced by foreign bodies. For the purpose of this study 205 cases have been reviewed, hospitalized between the years of 1925 and 1934.

EXPECTANT TREATMENT

In the study of the literature, the dominant opinion expressed is that lung abscess should be treated medically or expectantly over a considerable period of time. There are no landmarks given as to when this treatment should cease; but it is often said that surgery should be done before the abscess becomes chronic, and this time is set arbitrarily at about six weeks to two months. The records seem to show, however, that surgery is seldom applied within this period.

Under the term of medical treatment I have included inhalations, postural drainage, bronchoscopy, artificial pneumothorax, phrenicectomy, arsphenamine and the

Read before the Section on Surgery, General and Abdominal, at the Eighty-Fifth Annual Session of the American Medical Association, Cleveland, June 14, 1934.

application of roentgen therapy. Space does not permit of prolonged discussion. Some of them, however, it would seem to me will bear consideration.

Surgical treatment includes only open drainage or lobectomy.

Postural drainage has been more generally advocated by internist and surgeon than any other one measure. I can find nothing in the literature that speaks of its disadvantages. Nevertheless I am cognizant of three cases in which death resulted from its application, and some warning may therefore be necessary in the use of this valuable procedure. Its advantages are not nearly so great in abscess as in bronchiectasis. It is valueless until an abscess has broken into a bronchus. To apply this remedy to a very sick patient—cyanotic, with high fever, rapid pulse and a low vital capacity—is courting disaster.

I myself know from personal experience how much easier it is to get material up from the bronchi in the sitting than in the lying posture; and I know how thwarted the diaphragm becomes in its expulsive efforts in the position of postural drainage. Experimental evidence verifies these clinical observations. Prinzmetal and Kountz [1] state that pulmonary ventilation is facilitated in the upright position. It has been shown that the vital capacity is generally higher, that the volume of the lung is greater, that the midcapacity is greater, that the accessory muscles of inspiration can be used to better advantage and that the diaphragm is lower than in the recumbent position. In their experiments on thirteen individuals, six of whom were without orthopnea and seven with, they found in all cases that the intrapleural pressure was less negative in the recumbent than in the upright position, and that the shift was more marked in the patients with orthopnea than in the control group. Occasionally the intrapleural pressure rose above the atmospheric pressure in the recumbent position. A less negative intrapleural pressure will limit pulmonary ventilation, and, according to the work of Starling, interferes with pulmonary circulation. The heart also shifts from a more longitudinal to a transverse position. Briscoe [2] states that, in the change from the upright to the supine position, the volume of the chest is reduced from 10 to 20 per cent and the reserve air by about 1,200 cc.

All these factors would work an even greater disadvantage in the position of postural drainage. It is easy to see, therefore, why this position might have brought about the death of the three patients mentioned. These factors also tend to produce compression and atelectasis of the lung, and, I feel, may so lower its resistance that infection may take place, with intrapulmonary spread.

Postural drainage has its place in the treatment of lung abscess; but it must be given with due consideration to the condition of the patient, the location of the abscess, and the direction of the bronchial tree leading from the infected area.

Bronchoscopy has its advocates. Here too is a procedure that cannot be carried out with sufficient frequency on a sick patient really to keep an abscess drained, as we say, surgically. Many have tried it only to give it up as a routine. It is not entirely void of the danger of setting up further inflammation. Bronchoscopy is useful for the purpose of eliminating the possibility of a foreign body, for the diagnosis of a malignant condition or stenosis as a cause of the abscess and for the purpose of shrinking granulations to permit of better drainage through the bronchus; but as a routine for the cure of the disease it is, in my opinion, unsurgical.

For artificial pneumothorax, again, there are advocates who are enthusiastic, especially those who have used it as their routine in tuberculosis. If such therapy is employed, only small quantities of air should be used at each refill, and a negative pressure maintained. I would say, however, that most surgeons are fearful of adopting this mode of treatment. While some patients get well under its use, it is applicable to but few. It tends to break down adhesions, which is disadvantageous. A long period of time is required in its application thereby causing delay, especially when surgery is beneficial. It not infrequently causes rupture into the pleural cavity with formation of a putrid empyema, with a mortality of from 80 to 90 per cent. In my experience the risks of the procedure have not justified its use.

Temporary phrenic paralysis by crushing of this nerve is best applied for abscess of the lower lobe with adhesions to the diaphragm but has very limited application.

Arsphenamine as a cure has been unsatisfactory in my hands. While some improvement may occur in the general condition of the patient, I have not found it to be a specific agent, spirochetes still being present on careful examination.

The recent use of roentgen therapy to cause more rapid liquefaction of the abscess, early rupture into a bronchus, clearing up of surrounding pneumonitis and delimitation of the disease (as frequently happens when used in the treatment of carbuncles) is probably advantageous, but it has not been used in a sufficient number of cases to warrant a definite conclusion as to its value. I feel that, with careful studies as to proper dosage and time of application, roentgen treatment may prove to be a most valuable adjuvant.

X-RAYS IN DIAGNOSIS

The use of x-rays for diagnosis is most important. Physical examination is, at best, equivocal. The x-rays should be used frequently and are the best method of following the course of the disease. Roentgenograms should be taken in various directions, at least the anteroposterior and lateral, and sometimes with varying densities. Many medical men fail to use the x-rays sufficiently often, depending rather on their physical examination, in which they have a certain pride.

Useful as the x-rays are, they should not be relied on absolutely. Comparison of the roentgenogram with the postmortem examination frequently reveals this discrepancy. A cavity may be present but obscured by a surrounding pneumonitis. Liquefaction occurs early in this disease but may be undiagnosed by x-rays for a considerable period of time. When the pleura is thickened, much of the process is obscured and the x-rays lose some of their value. I have seen both small and large loculated empyemas, shown either by operation or post mortem, that had been missed completely by roentgen examination. In chronic cases even greater errors can be made as to multiple cavitations, and without the presence of earlier pictures taken months before it would be most difficult to diagnose even the location

1. Prinzmetal, Myron, and Kountz, W. B.: Intrapleural Pressure in Orthopnea, Proc. Soc. Exper. Biol. & Med. **31**: 610-611 (Feb.) 1934.
2. Briscoe, Charlton: Mechanism of Inflation of the Lung, Lancet **2**: 513 (Sept. 5) 1931.

of the abscess. So once again, without wishing to be a pessimist and recognizing, to the utmost, the value of the x-rays, I feel that one must at times base one's judgment on the clinical course rather than on the x-rays, if they do not verify one's conclusions.

The use of iodized oil seldom gives any information in lung abscess, as the cavity is almost never filled by the opaque medium, just as the cavity does not empty easily by postural drainage. It is of advantage when the abscess has broken into the pleura or is complicated by a bronchiectasis. Its disadvantages are great in that it remains within the lung for months at a time, and it is most difficult to read future roentgenograms. Many mistakes have been made in the reading of x-ray plates when it was not known that iodized oil had previously been employed.

BACTERIOLOGY

At this stage of the discussion a word should be said about the bacteriology of lung abscess. Efforts have constantly been made to find the etiologic agent of this disease. Until the present time this has proved a fruitless task. At first these studies were confined to aerobic organisms only; later they were supplemented by anaerobic studies, especially those of J. Cohn, Varney and D. T. Smith. Smith's studies have been by far the most complete. He concluded that four types of anaerobic organisms (spirochetes, vibrios, fusiforms and cocci), acting in symbiosis, are responsible for the inception of this disease. These bacteriologists have all demonstrated the similarity between the flora of abscesses and the flora of the buccal cavity, and that these flora are predominantly anaerobic. Olitsky and Gates have recently demonstrated the presence of filtrable forms in the nasopharynx. No studies on filtrable lung abscess material have as yet been reported.

In my own work, carried on in the laboratories of the Hooper Foundation under the direction of Drs. K. F. Meyer and M. S. Marshall, I confirmed the studies of Smith, but after careful bacteriologic study of bronchoscopic specimens I was unable to use the knowledge gained for either treatment or prognosis.

It would seem that this problem must be attacked now along the newer lines of bacteriologic research and immunologic studies. Under Dr. Charles Weiss and his co-workers, a new plan of procedure is being set up which, after a few years, I hope may give more information than has been available in the past. This work is based on the investigations of Avery, Heidelberger and Seegal, studying the purified nucleoproteins and specific carbohydrate fractions derived from various aerobic and anaerobic bacteria that have been frequently isolated from lung abscess. Along with this are cytologic studies and studies on the enzyme and antienzyme balance of the purulent pulmonary exudate.

MORTALITY

I believe it can be said that the lung has a better defensive mechanism for the resistance of infection than any other organ of the body, and that it has a wonderful recuperative ability. If this were not so, lung abscess would be a very common disease. The same organisms transferred to other parts of the body would give a mortality much higher than that of lung abscess. Every one will remember cases in which implantation has occurred in the chest wall after thoracentesis, causing spreading gangrene and necrosis and rapid death, with practically 100 per cent mortality. We are, I think, forced to ask ourselves the question whether or not, surgically, we are treating this infection with the same ability and the same purposefulness, helping the forces which nature gave us, as we have learned to do in other parts of the body.

One cannot help but draw an analogy between the history of the treatment of acute appendicitis and acute gallbladder disease and that of lung abscess. So long as the expectant treatment held sway, no dent could be made in the high mortality of these diseases. The fact that under expectant treatment a certain number of cases improved caused physicians to hope that every case would fall within this group. As the result of similar procrastination in the treatment of lung abscess, the surgeon is faced constantly with the end-pathology of this disease: gangrene, hemorrhage, ruptures into the pleura, multiple abscesses, marked fibrosis and bronchiectatic dilatations. For this reason, I believe the course that has been followed in the past will get us nowhere in the battle against this very prolonged and exhausting disease.

May I also call attention to the fact that in this problem there is not only the question of mortality but also, bound up with it, the long hospitalization period, the economic and the social problem of months or years of disability, in many cases preventable. The picture is a tragic one from every standpoint, and difficult of solution; and we as surgeons should, I feel, concentrate on it.

THE HEALING OF LUNG ABSCESS

Certain basic principles underlie the healing of lung abscess, treated either medically or surgically. These are perfect drainage of the infecting material as in other surgical abscesses, aeration of its interior, and the ability of the cavity wall to collapse.

When a lung abscess heals by medical treatment, it must first rupture into a bronchus to produce drainage. Unfortunately, this drainage is often imperfect, resulting in the exacerbations that are so characteristic of the disease. These are ushered in by a rise of temperature and diminution of sputum, and as a result the disease may spread to new areas, producing either a pneumonitis or a secondary abscess. These bouts of fever are allowed to occur again and again without active intervention, which is quite contrary to the usual surgical procedure in abscesses of other parts of the body.

The second factor is the entrance of air into the cavity. As the causative agent is an anaerobe, the aeration of the cavity produces an unfavorable environment for its growth. This aeration is not always complete when rupture occurs through a bronchus.

In the third place, collapse of the walls is important and occurs best when the lung has retained its elasticity and before fibrosis has taken place.

ADVANTAGES OF SURGICAL TREATMENT

The advantages of surgery in meeting these requirements is evident. Perfect drainage of the abscess cavity can be obtained, leaving no undrained pockets from which extension can take place. Through-and-through aeration of the cavity and bronchi results. The importance of the through-and-through passage of air cannot be overestimated. This is exemplified in the surgical treatment of very chronic abscesses, with numerous and large bronchial fistulas. After months of drainage, if

the fistulas are closed by any method, there is recurrence of an abscess, even though the area is aerated on the bronchial side. Thirdly, by a liberal removal of the roof of the cavity, its early collapse is facilitated.

The choice of time and procedure in the surgical treatment of lung abscess will always require rare judgment. The condition of the patient is of more importance than the method of operating. At times only a minimal amount of surgery can be applied. Even a hypodermic of morphine may so lower the vital capacity that the patient becomes inoperable.

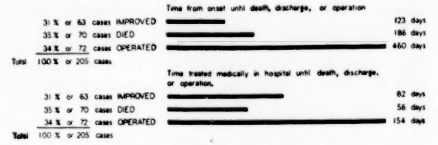

Time from onset until death, discharge, or operation
31 % or 63 cases IMPROVED
123 days
35 % or 70 cases DIED
186 days
34 % or 72 cases OPERATED
460 days
Total 100 % or 205 cases
Time treated medically in hospital until death, discharge, or operation.
31 % or 63 cases IMPROVED
82 days
35 % or 70 cases DIED
56 days
34 % or 72 cases OPERATED
154 days
Total 100 % or 205 cases

Chart 1.—Results of medical treatment.

There are certain important requisites that may be mentioned. These are (1) careful localization, (2) the performance of the operation in two or even more stages instead of one, (3) the use of the cautery or diathermy knife in exposing the abscess, and (4) the use of compression by a gauze pack or paraffin.

The first point of importance in technic is the careful localization of the abscess. Many studies on localization have recently been made: Neuhoff on a clinical basis, Leveton [3] by anatomic studies of the lobes of the lung and the arrangement of the bronchi, and Johnson [4] by roentgenologic studies in which localization is accomplished by measuring stereoscopic distance, with three markings on the chest. By any or all of these methods very accurate localization of the abscess can be made, which will give a direct approach to it at its nearest point to the surface and probably through the area of adhesion.

I have come to believe that the operation, whether it is to be done early or late, should always be done in two stages. Even late cases at times show surprisingly few adhesions; and in this type of case the element of compression before the abscess is opened plays a considerable part in its cure. In the early cases, in which only fine adhesions are present between the parietal and visceral pleura, the abscess may be entered through the line of adhesions; but if the patient coughs at the time of operation or at the time of a dressing, these adhesions may separate and the pleural cavity become infected.

In chronic cases the exposure of a considerable area over the lung abscess, with or without removal of the ribs, and the application of a pack of gauze or paraffin for from five to seven days, the wound being sewn up tightly as recommended by Dolly and later by Overholt, may have distinct advantage. I have on many occasions produced compression by such a pack, either as a planned procedure or because the patient was too ill to proceed further with the operation, and have been surprised at the improvement that has always taken place in the amount of sputum, diminution of cough and the well being of the patient. The second stage is therefore done with the patient in very much better condition.

Another point of importance in technic is the use of the diathermy knife or cautery. Thorough cauterization of the top of the abscess should be made by slow coagulation. This avoids the danger of air embolism and the dislodgment of emboli. The plunging of a forceps or the finger into the cavity, with injury and trauma to the surrounding lung, is dangerous. In the report of cases to be given, I had one death from air embolism, and another presented convulsive seizures with recovery. Both of these were chronic cases and occurred immediately on the thrusting of an aspirating needle into the lung at the second stage, in an attempt to locate the abscess.

These are only a few points in technic that may help to lower the surgical mortality; but they can, at best, play an indifferent part. It would seem to me that the main problem of lung abscess at the present time is to change the attitude of the profession toward its treatment, just as the surgeon has changed the attitude of the internist toward the treatment of appendicitis and gallbladder disease.

RESULTS

The accompanying charts and tables give the results of the study of 205 cases. They graphically depict the weakness of present-day methods in the treatment of lung abscess.

Chart 1 shows the results of medical treatment. In 205 cases, 133 were treated medically. Sixty-three cases, or 31 per cent, were improved. Lord, in his recent statistics of 210 cases from the Massachusetts General Hospital, showed about the same results: one in three cases improved, or about 33⅓ per cent, under medical treatment.

Seventy patients died, a mortality of 35 per cent. Seventy-two cases, or 34 per cent, were referred to surgery, on an average of 460 days from the time of the onset of the disease, and were on an average of 154 days in the hospital before operation. It will therefore be seen that the patients treated medically who died and also those which were referred to surgery had an average time of medical treatment that was very prolonged; and, as I will show later, surgery could not overcome the handicap presented.

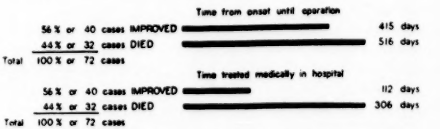

Time from onset until operation
56 % or 40 cases IMPROVED
415 days
44 % or 32 cases DIED
516 days
Total 100 % or 72 cases
Time treated medically in hospital
56 % or 40 cases IMPROVED
112 days
44 % or 32 cases DIED
306 days
Total 100 % or 72 cases

Chart 2.—Results of surgical treatment.

The second part of the chart again shows the prolonged stay in the hospital before surgical intervention—an average of over five months.

Chart 2 shows the results of surgical treatment, giving the average number of days from the time of onset until operation was performed. Forty cases, or 56 per cent, were improved but did not come to operation until an average of 415 days from the time of onset to operation. Thirty-two patients, or 44 per cent, died following operation. In this group, 516 days elapsed from the time of onset of the disease until operation was performed.

3. Leveton: Paper to be published.
4. Johnson, C. R.: Roentgenological Localization of Intrathoracic Structures, with Report of Findings in Nineteen Cases of Lung Abscess, Am. J. Surg. **8**: 1237 (June) 1930.

The second part of the chart shows the length of time these cases were treated medically in the hospital before surgery was advised.

Table 1 gives an analysis of the recurrences in 205 cases. After surgical treatment, twelve cases, or 6 per cent, recurred; after medical treatment forty-one cases,

TABLE 1.—*Analysis of Recurrences in 205 Cases of Lung Abscess*

	Cases	Per Cent
Recurred after surgical treatment	12	6
Recurred after medical treatment	41	20
Total recurrences	53	26
Result of treatment in 53 recurrent cases		
Cured	8	15
Died	31	59
Outcome undetermined*	14	26
Total	53	100

* Lesion still present clinically and by x-rays when last seen.

or 20 per cent, recurred, a total recurrence of fifty-three cases, or 26 per cent.

It should be remembered at this point that no doubt some of the patients who were discharged as improved under medical treatment had recurrences. This is further shown in the second part of the chart. In

TABLE 2.—*Results of Surgical Treatment According to Type of Operation*

			Improved		Died	
	Per Cent	Patients	Patients	Per Cent	Patients	Per Cent
Two stage thoracotomy	39	28	19	68	9*	32
One stage thoracotomy	44	32	15	46	17	64
Cautery pneumonectomy	8.5	6	3	50	3	50
Lobectomy	8.5	6	3	50	3	50
Total	100	72	40	56	32	44

* Two patients died before second stage was done.

these recurrences eight patients, or 15 per cent, were cured and thirty-one patients, or 59 per cent, died. Patients who are discharged from the hospital and have recurrences are subject to a higher mortality.

Table 2 shows the surgical treatment and results according to the type of operation in one and two stage

TABLE 3.—*Surgical Treatment of Patients Operated on Within One Hundred Days from Onset* *

Comparison of one and two stage thoracotomies

20 Patients	No. of Patients	Improved Patients	Improved Per Cent	Died Patients	Died Per Cent
Two stage thoracotomy	10	8	80	2	20
One stage thoracotomy	10	4	40	6	60

* Arbitrarily chosen.

thoracotomy, performed on seventy-two patients previously mentioned.

Twenty-eight patients, or 39 per cent, had a two stage thoracotomy. Of these, nineteen patients, or 68 per cent, improved; nine patients, or 32 per cent, died.

Thirty-two patients, or 44 per cent, had a one stage thoracotomy. Of these, fifteen patients, or 46 per cent, improved and seventeen patients, or 64 per cent, died.

This very marked contrast shows the advantage of two stage thoracotomy. In six cases of cautery pneumonectomy included, three patients, or 50 per cent, improved and three patients, or 50 per cent, died. These and the cases of the lobectomy group were of long duration (about four and one-half years) complicated by marked bronchiectasis and fibrosis.

In table 3 I have arbitrarily taken patients of the operative group 100 days from the onset of the disease. Of twenty such patients, ten had a two stage thoracotomy and of these, eight patients, or 80 per cent, improved, two patients, or 20 per cent, dying. Of ten patients with one stage thoracotomy, four, or 40 per cent, improved and six, or 60 per cent, died. This shows the advantage of the two stage over the one stage thoracotomy.

Chart 3 shows the causes of death in medically and surgically treated cases, and the time of death from the onset of the disease.

The causes of death under medical and surgical treatment are very similar, and brain abscess and hemorrhage

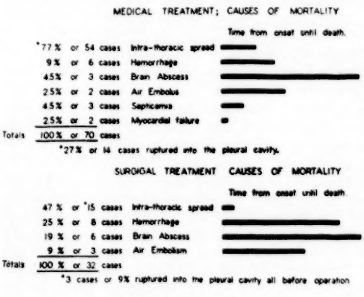

MEDICAL TREATMENT; CAUSES OF MORTALITY
Time from onset until death
*77 % or 54 cases Intra-thoracic spread 173 days
9 % or 6 cases Hemorrhage 268 days
4.5% or 3 cases Brain Abscess 690 days
2.5% or 2 cases Air Embolus 321 days
4.5% or 3 cases Saphenous 105 days
2.5% or 2 cases Myocardial failure 25 days
Totals 100 % or 70 cases
*27% or 14 cases ruptured into the pleural cavity.
SURGICAL TREATMENT CAUSES OF MORTALITY
Time from onset until death
47 % or *15 cases Intra-thoracic spread 91 days
25 % or 8 cases Hemorrhage 891 days
19 % or 6 cases Brain Abscess 1308 days
9 % or 3 cases Air Embolism 880 days
Totals 100 % or 32 cases
*3 cases or 9% ruptured into the pleural cavity all before operation

Chart 3.—Causes of mortality.

occur late in the disease. It would be only fair to believe therefore that, had operation not been undertaken, death would have occurred from similar causes under medical care.

CONCLUSIONS

In this paper I have been hypercritical and perhaps dogmatic concerning our present methods of treatment. Many will take exception to much that I have said. I am glad, however, to stir up argument and debate on this subject. Because patients get well under any and all forms of treatment, at times miraculously, it is not easy to evaluate the advantages and disadvantages of any form of treatment that may be suggested.

The tables and charts that I have presented, which I believe are not far different from other series that may be made on this basis, show definitely that both the medical man and the surgeon should take a more positive action in the treatment of lung abscess.

I hope that at some time a group report of cases throughout the country may be made under the auspices of some central body whereby both accurate statistics on the incidence, mortality and hospitalization period would be obtained and a better knowledge of the treatment of the disease disseminated throughout the profession.

384 Post Street.

COMPLICATIONS OF PEPTIC ULCER

THEIR PROGNOSTIC SIGNIFICANCE

SARA M. JORDAN, M.D.
AND
EVERETT D. KIEFER, M.D.
BOSTON

The more recent observations on peptic ulcer have produced many changes in opinion. Many dogmas formerly held in high esteem have been discarded, to be supplanted by beliefs that would once have been regarded with suspicion. This change in sentiment has concerned various phases of the ulcer problem—the nature and etiology of the lesion itself, the preferred status of medical or surgical treatment, and the outlook for permanent cure of the lesion.

These questions are all interrelated and their true answers depend at least in some measure on a still unsolved problem, the basic etiology of the disease. It has gradually become obvious that one must think not of cure of the disease but rather of "successful management." In fact, it may be stated that the life history of ulcer in an ulcer-bearing individual ends only with the life of the individual.

The successful medical management of the disease, the purpose of which is to produce a remission and prevent a recurrence, depends on various intrinsic and extrinsic factors. Such well known factors as limitation of nervous tension and fatigue and adherence to a careful regimen of living are at least relatively within the control of the patient and the physician. The intrinsic factors, on the other hand, comprise (1) the nature of peptic ulcer in general and (2) the nature of the individual ulcer, particularly its location, size and complications. These are the uncontrollable factors with which the ulcer patient must reckon, and while they are not controllable they provide for the student of the ulcer problem many pertinent considerations. Especially interesting is the matter of outlook for successful management in ulcers with various complications.

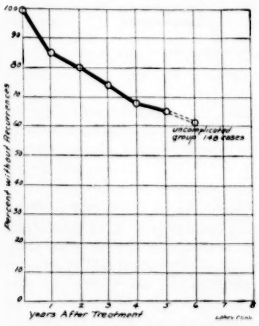


Chart 1.—Uncomplicated duodenal ulcer.

This study was an effort to provide some data on the specific question Is a duodenal ulcer with one of the common complications less successfully managed than an uncomplicated duodenal ulcer?

The data were assembled from the case records and check-up reports of patients whose diagnosis was reasonably certain, and who were followed for periods varying from six months to ten years.

The complications considered in this study were pyloric obstruction, hemorrhage and intolerance to alkali therapy.

Read before the Section on Gastro-Enterology and Proctology at the Eighty-Fifth Annual Session of the American Medical Association, Cleveland, June 14, 1934.

OBSTRUCTION

The criterion used as evidence of obstruction was gastric retention of part of the barium meal for six hours. Gastric retention in these cases can safely be assumed to be associated with pathologic changes, since other extraneous and transitory causes of pylorospasm were ruled out by repeated examination.

In the consideration of pyloric obstruction associated with duodenal ulcer, the following points were studied:

1. In what percentage of cases does medical management relieve the obstruction?
2. How often does obstruction recur in these cases?
3. Is the ulcer complicated with obstruction less amenable to successful management than the uncomplicated ulcer?
4. Does the degree of obstruction influence the prognosis?

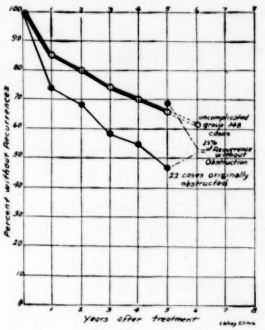


Chart 2.—Duodenal ulcer with obstruction.

The group studied comprised seventy-nine cases, fifty-six males and twenty-three females. In 77 per cent of the cases the age of the patient was above 40 years. In 68 per cent of the cases the duration of symptoms before help was sought was over five years, suggesting that long standing inflammation and edema were partly responsible for the onset of obstruction. Vomiting, the commonest symptom indicating obstruction, was found as follows: spontaneous vomiting in sixty-five of the seventy-nine cases; self-induced vomiting in three cases; in eleven, no history of vomiting was obtained.

The four questions proposed were answered in this study by the following data:

Of the total group of seventy-nine cases, only 11 per cent required surgery for the immediate relief of obstruction. Relief was obtained in the other seventy cases (89 per cent) by hospital management for from one to three weeks, indicating that in the majority of cases obstruction is due to inflammatory changes, spasm and edema, and not to cicatrix or hyperplasia. The degree of obstruction was of no significance as far as relief by medical management was concerned, equal relief being obtained in patients with over 50 per cent retention as well as in those with 10 per cent or under.

In twenty-four, or 34 per cent, of the seventy patients relieved by medical management there were recurrences, but only nine of these had obstruction. Distress alone or with hemorrhage occurred in the other fifteen. Thus it appears that the obstructing lesion is not a distinctive type of ulcer but that obstruction may be a complication in one attack, and hemorrhage or distress without gastric retention may occur at another.

The question whether obstruction as a complication decreases the possibility of successful management is perhaps best answered by the following data:

The tendency to recurrence in a given group of patients may be more graphically shown by plotting the percentage remaining symptom free against the number

of years that has passed since the treatment was begun. Our experience with 148 cases of uncomplicated duodenal ulcer followed for five years or longer is represented by chart 1, which shows the rate at which relapses occurred. Although somewhat steeper in the first year the curve quickly assumes the character of a straight line, the direction of which is unchanged at the five year point. This indicates that the arbitrary choice of a five year period in the study of the end results of

Observations in Seventy-Nine Cases

	Number of Cases	Relief by Medical Management	Type of Recurrence		
			Distress Only	Obstruction	Hemorrhage
Group 1 (10% retention or less)	15	86%	1 case		
Group 2 (10 to 30% retention)	19	89%	2 cases	4 cases	2 cases
Group 3 (30 to 50% retention)	18	89%	2 cases	3 cases	1 case
Group 4 (over 50% retention)	27	89%	3 cases	2 cases	4 cases
Total	79	70 cases	8 cases	9 cases	7 cases

treatment is unjustified, since the tendency to recurrence is just as great at the end of five years as it was during the previous years. In fact, a sufficient number of recurrences are known to have occurred in the sixth year to continue the curve in the same direction.

Of twenty-two cases complicated by pyloric obstruction followed for five years or more, there was recurrence in twelve cases: six in the first year, one in the second year, two in the third year, one in the fourth year, and two in the fifth year. Chart 2 shows a comparison of these figures with those of uncomplicated cases, from which comparison it may be concluded that obstruction as a complication makes the prognosis somewhat less favorable than in the uncomplicated case. The difference in the recurrences at the end of five years is 19 per cent.

Very mild obstruction, 10 per cent or less, apparently has no effect on the prognosis, but gastric retention of more than 10 per cent has an unfavorable influence; but it does not parallel the degree of obstruction.

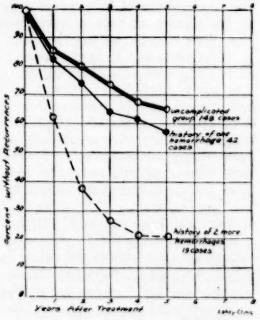

uncomplicated group 148 cases
history of one hemorrhage 42 cases
history of 2 or more hemorrhages 19 cases
Years After Treatment

Chart 3.—Duodenal ulcer with history of hemorrhage.

HEMORRHAGE

In a group of forty-two patients giving a history of one gross hemorrhage, 17 per cent were found to have had a recurrence during the first year, and during the first five years 43 per cent experienced a recurrence, leaving 57 per cent with an uninterrupted remission. This indicates that hemorrhage is a sign of a somewhat more severe type of ulcer and has some, but not marked, prognostic significance.

The history of two or more gross hemorrhages is decidedly more serious. In a group of nineteen patients with this history, only 21 per cent remained free from a recurrence for five years. In another group of thirteen cases, followed for only two years, there were 54 per cent with recurrences. In nearly all cases the recurrence was in the form of another gross hemorrhage. Since the mortality of gross hemorrhage is 5 per cent, we frequently advise patients giving a history of two or more gross hemorrhages to have the ulcer removed.

Curves representing the groups presenting hemorrhage show a more rapid rate of recurrence. The group with two or more hemorrhages shows a particularly rapid rate during the first three years, but the change in direction here suggests that the first three years are the critical years for a patient of this type. The prognostic significance of multiple hemorrhages appears to be definitely bad.

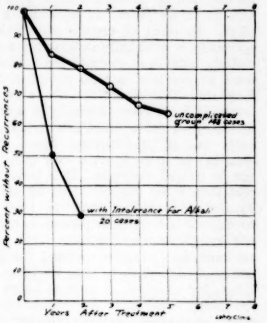


Chart 4.—Duodenal ulcer with alkalosis.

ALKALOSIS

Alkalosis from alkali medication is a complication of therapy arising only when efforts are made to neutralize the stomach contents with sodium bicarbonate. Many patients may develop toxic symptoms at some time during their treatment, but in nearly all cases the condition is mild or transient and is easily relieved by adjusting the dosage of alkalis. A few patients, however, show a high degree of intolerance to sodium bicarbonate, and any dosage even approaching adequate control of gastric acidity produces severe symptoms of alkalosis. It has been shown that there is a definite association between intolerance to alkalis and impaired renal function, but clinical experience suggests that the etiology is much more complicated than this. There appears to be a marked correlation between the degree of intolerance to alkalis and the activity of the ulcer. Severe alkalosis may therefore indicate a particularly severe lesion and a marked disturbance in gastric secretion, as well as renal disease. That these patients do not do well under medical management is shown by our experience with twenty patients, among whom 70 per cent had a recurrence within two years.

The curve representing this high rate of recurrence shows a marked variation from the "standard."

CONCLUSIONS

Obstruction, hemorrhage and intolerance to alkalis are complications that influence prognosis in the medical management of duodenal ulcer.

Obstruction of all degrees in the group of seventy-nine cases studied was relieved in 89 per cent by medical management. It recurred later in 13 per cent.

Obstruction, hemorrhage and intolerance to alkalis were all unfavorable factors in the medical management of the disease. Single hemorrhage had the least effect on prognosis; obstruction was next in its unfavorable influence; multiple hemorrhage and intolerance to alkalis had the most harmful effect on the later course of the disease.

605 Commonwealth Avenue.

ABSTRACT OF DISCUSSION

DR. BURRILL B. CROHN, New York: It is essential in discussing obstruction to realize that spasm is probably a much greater element than organic obstruction. This was taught by Sippy many years ago when he showed the remarkably good effects that could be obtained by lavage in cases of ulcer with retention. One is surprised to see complete disappearance of food stasis in patients who have as much as twenty-four or forty-eight hours residue, on using an Ewald tube to lavage the stomach. These are instances of spasm and they are in an entirely different category from obstruction. A patient should be taught to use an Ewald tube to empty his own stomach once a day. If he empties his stomach every night he may not be cured, but he is relieved of the symptoms and may go on for years. It represents a long history, a burnt-out ulcer. In cases of organic obstruction the ulcer in resected specimens is practically nothing but a small mass of scar tissue, and the pylorus is down to the size of a quill. Those patients must be operated on; no palliative treatment is good in the long run. My figure for the mortality of hemorrhage was less than 5 per cent. Actually in a series of 100 cases I found mortality of acute gross hemorrhage to be as low as 2 per cent; that is an important figure to keep in mind. There shouldn't be so much panic over gross hemorrhage. Such cases can be treated medically. It is better to accept defeat in 2 per cent than to be panicky about 98 per cent and take a radical position of advising operative treatment. If one does not roentgenograph an ulcer patient soon after a gross hemorrhage, one is liable to miss the ulcer. The hemorrhage seems to have an immediate effect in causing the healing of the ulcer. If one waits ten days or two or three weeks after the hemorrhage, for resection, it may no longer be possible to recognize the ulcer. Specimens of ulcers resected three weeks after gross hemorrhage showed complete healing of the ulcer and disappearance of the lesion. My experience is that if patients survive the first hemorrhage they are likely to survive repeated hemorrhages. The ultimate prognosis of the ulcer is not altered by the incidence of hemorrhage. The ultimate course of the case is about the same with or without hemorrhage. Eventually Dr. Jordan's and Dr. Kiefer's and my figures will come down to about 40 per cent of ultimate cures, and yet 40 per cent of ultimate cures under the medical treatment of ulcer is not a good percentage. The problem is one between the patient and his ulcer, not between the patient and his doctor or his surgeon. The patient has to learn to treat the ulcer with respect and not abuse it with alcohol or mental and physical strain.

DR. J. TATE MASON, Seattle: Since the first description of peptic ulcer was made, nearly a century ago, I am sure that no paper has been presented that has given such an intimate understanding of what may happen in complications such as hemorrhage, obstruction and intolerance to alkalosis as Dr. Jordan and Dr. Kiefer's paper has just given. I think that in these vicinities there might not be 11 per cent; however, as 11 per cent of the people had to come to operation almost immediately for relief, and a little further on 13 per cent, and probably in time a few more, it may be inferred that probably at least 25 per cent have had surgical intervention. I would pray that if patients with complications do not respond very rapidly to medical treatment, one should not hold them too long until one advises surgical relief. The operation must not only eradicate the diseased portion and the ulcer but also relieve the acidity. The surgeon will be able to do that either with the pyloroplasty or with the gastro-enterostomy, or he may eliminate acidity by a subtotal gastrectomy. And I present this problem not with reference to the technical side but to suggest that, if one decides that a patient must have a subtotal gastrectomy, one ask for a high subtotal gastrectomy to eliminate the acids, almost as high as for a near total gastrectomy in these very pronounced cases. Physicians at this meeting come from nearly all sections of the country, but I come from the far Northwest, and many of my patients live thousands of miles away. They have to go back to Alaska and stay for months at a time, and this has to be considered seriously in regard to medical treatment. The casual, ambulatory treatment has been satisfactory in 60 per cent of uncomplicated cases of duodenal ulcer in the clinic with which I am affiliated. By treatment they were gotten to an uncomplicated stage, and from that time on a casual ambulatory treatment was as successful as any other. Serious hemorrhage after medical treatment occurred in 6 per cent of the patients. A mortality of 2 per cent attributed to hemorrhage occurred in a follow up of from two to ten years. I have observed that two thirds of the bleeding is apt to occur during the silent period; if it occurs in the period of erosion, it is likely to be much more severe.

DR. HENRY A. RAFSKY, New York: Pyloric obstruction, complicating peptic ulcer, must be divided into the inflammatory and cicatricial types. This differentiation should be made before attempting to treat pyloric obstruction, because the inflammatory type can be treated medically whereas the cicatricial type should be treated surgically. Clinically and roentgenologically it is almost impossible at times to make this distinction. The therapeutic test must be applied to do so, and various methods have been suggested for these patients. I want to show a method that can be easily applied, but before I do that I want to say a word about alkalosis in relation to pyloric obstruction. Patients with pyloric obstruction have a greater tendency to alkalosis; therefore, alkalis should be used with caution in these patients. I have found that by using very small amounts of alkalis in patients with pyloric obstruction, irrespective of how profound the stenosis was, the carbon dioxide combining power of the blood did not rise, and the blood chlorides did not fall beyond the normal limits. The tube has a prognostic as well as a therapeutic value; for, if the bucket and tube go through the pylorus in four or five days, the chances of making a recovery are good, but, if it does not go through, the patient is apt to have a recurrence of the symptoms within a very short time. It is sometimes difficult to get the bucket through the pylorus. What I did, following the suggestion made by Dr. Einhorn, was to take a small bead with a string and harness it to the duodenal bucket. The bead and string act like a team of horses and pull the bucket and tube through the pylorus, when the inflammatory process subsides somewhat.

DR. JULIUS FRIEDENWALD, Baltimore: I should like to refer again to a complication presented by a definite though small group of cases of pyloric obstruction of a rather aggravated type, which have yielded to medical management. All these cases were of long duration, presenting the typical signs of the disease as well as very definite roentgen changes, so that there can be no question that the condition must have been definitely due to actual tissue narrowing. Lucas, Vander Hoof and others have reported similar instances. It is possible that, owing to medical treatment, pyloric congestion and edema are relieved and the muscular tone of the stomach sufficiently improved to overcome the effect of the pyloric lesion. I have collected ten or twelve instances of this type among cases which have been permanently relieved over a period of from six to eight years, not only remaining free from all digestive symptoms but also revealing normal motor function as well as roentgen evidence. This group, though small, is perfectly definite, and I am convinced that in at least some instances of pyloric obstruction due to ulcer a favorable prognosis may be anticipated even without the aid of surgery.

DR. WALTER L. PALMER, Chicago: I should like to draw a rather fine line between the healing of an ulcer and permanent cure of the disease. Many of these lesions heal completely, and the patients may remain symptom free for variable periods of time, perhaps six months, six years or more, and then have a recurrence. This does not reflect at all on the efficacy of the initial treatment for the original lesion. It does show, however, that the therapy has not altered the fundamental conditions which led to the formation of the ulcer originally. These have persisted and have led to the development of a new lesion. The problem, therefore, is not that of the therapy of a given lesion but that of etiology, of preventing ulcer formation. I should like to call attention to one observation which Drs. Jordan and Kiefer have made; namely, that there was a 70 per cent recurrence in two years in the group intolerant to alkali. This high incidence of recurrence seems to me of great significance, for it constitutes further evidence of the importance

of gastric free acidity in ulcer. Mention has been made in the discussion of the beneficial effect of hemorrhage on an ulcer. I believe that this is due to the careful and prolonged treatment which the patient usually receives following a hemorrhage, rather than to a specific effect of the hemorrhage itself.

DR. RALPH C. BROWN, Chicago: The conclusions of the authors agree with my experience at the Presbyterian Hospital. There is a point I want to make with regard to alkalosis. It is not as simple a thing as one would like to believe. As the authors said, there are cases in which the basis of the alkalosis is absolutely not understandable. It may occur in the young individual with a perfect renal function, with normal arteries, with a good liver, and yet there will be just as striking an idiosyncrasy for alkalis as some persons exhibit for belladonna. Fortunately these cases are rare. The cases in which one runs into difficulty with alkalosis, and they are certainly not uncommon, are those in which one is forced to combat the destructive effect of a high grade, continued night secretion, and the only way that can be done is either by giving alkalis or keeping up a continuous aspiration of the stomach during the night hours with the Rehfuss tube. In these cases, especially in the obstructive cases, in which the chloride ion is being lost from the body by vomiting or by the aspiration of a large volume of gastric contents, with a drop in chlorides to 300 or 350 mg., one cannot safely give alkalis by day and also by night. One solution of the difficulty is to use the acid-combining power of milk as a neutralizing medium. There is sufficient albumin in milk to neutralize an equal volume of normal gastric juice. During the first week of management in these difficult cases of ulcer with a high grade continued secretion, I frequently give milk in 2 ounce feedings every half hour during the day. This permits the use of alkalis during the night hours, or, if one wishes to avoid entirely the use of alkalis for a brief period, the continued night secretion can be handled by half hour aspirations, as by an indwelling Rehfuss tube.

DR. SARA M. JORDAN, Boston: There are two words that will probably need further explanation. One is the word "obstruction," which we used in that paper to indicate any retention of barium in six hours. Dr. Crohn in his discussion said that retention by spasm was not obstruction. We considered it in this discussion as being the obstruction due to any cause and indicated by retention in six hours. The fact that 11 per cent of the patients had to be operated on during the first three weeks of treatment seems to us to indicate that probably in the highest majority of that 11 per cent the obstruction was due to cicatrization, whereas in the other 89 per cent who went on and were completely relieved of the obstruction it was due either to spasm or inflammation or to edema, and there was no way in which we could determine which did cause the retention. The other word which I think needs explanation is the word "recurrence." We have said that a certain percentage of the cases in the uncomplicated ulcer recur after so many years. By "recurrence" we mean any distress, not necessarily requiring surgery, but any distress which indicated that the ulcer was again active, frequently not as serious as the original distress, and frequently relieved by a very modified form of management; so it is not always a serious recurrence of which we are speaking. Dr. Crohn mentioned the fact that we were, or people were, getting panicky about hemorrhage, and I must confess that in multiple hemorrhage we have perhaps not gotten panicky but very serious minded, and we not infrequently feel, in a case of long-standing multiple hemorrhages, that the patient should not waste any more time on medical treatment but should have surgery and, where it is possible, we advise, as Dr. Mason said, a high resection. This may seem very radical. I was surprised that Dr. Crohn was so conservative about getting panicky on the question of introducing surgery, but we really do feel that in this particular group of cases surgery and high resection are indicated to produce an anacidity. With respect to the question of whether or not that repeated hemorrhage is due to the old original ulcer, a point which Dr. Palmer brought up, or to the fact that the patient has a tendency to develop an ulcer, that must, of course, be left undetermined in most cases; but frequently the condition found at operation will seem to indicate that it was the old, original ulcer which had partially healed and then become eroded again, exposing, perhaps, the same blood vessel. Surgery seems to be the only treatment in those cases. The therapeutic test which Dr. Rafsky mentioned is interesting. We feel that our best therapeutic test is the period of medical management. If the obstruction is relieved in a few days or weeks, we consider that it is a very final therapeutic test or treatment.

THE UNSTABLE OR IRRITABLE DUODENUM

CLINICAL OBSERVATIONS IN ONE HUNDRED CASES

JULIUS FRIEDENWALD, M.D.
AND
MAURICE FELDMAN, M.D.
BALTIMORE

During the last few years, increased interest has been manifested in the study of disturbances of the duodenum. While up to a comparatively short time ago ulceration of the duodenum was the only disease that was clearly defined and its significance understood, the clinical importance of duodenal dysfunction in general has gradually come to be more and more realized as a factor in disease. Of the disorders associated with this portion of the bowel, duodenitis, periduodenitis, pericholecystic adhesions, duodenal stasis (continuous and intermittent), obstruction and duodenal anomalies such as diverticula and the redundances may be mentioned.

In this communication we shall endeavor to present the clinical picture of a not uncommon form of duodenal disturbance known as the irritable or unstable duodenum.

Disturbances of motility of the duodenum have long been known. Wheelon [1] has especially called attention to these changes in obstruction in this portion of the bowel and has pointed out that duodenal motility consists of rhythmic segmentation and peristaltic waves, which bear a definite relation to that of the pyloric sphincter and antrum. The regurgitation of bile and fecal matter in cases of intestinal obstruction is the result, according to this observer, of active antiperistaltic contractions with a loss of rhythmic segmentation followed by tonic closure of the pyloric sphincter, produced possibly by a toxemia. He, moreover, points out that rapid distention of the duodenum causes inhibition of the rhythmic segmentation and peristalsis. It has likewise been long established that lesions in the duodenum such as ulcer or duodenitis are commonly associated with a vigorous gastric and duodenal peristalsis, which can readily be visualized roentgenographically.

The irritable or unstable duodenum, like the irritable or unstable colon described by Kantor [2] and Jordan,[3] is a condition which has as yet not been clearly defined and concerning which there still exists considerable confusion. The term unstable is the more preferable, since at times a decreased rather than an increased irritability is noted. As has been pointed out by Jordan in regard to the unstable colon, here too the underlying

From the Gastro-Enterological Clinic of the Department of Medicine of the University of Maryland School of Medicine and College of Physicians and Surgeons.
Read before the Section on Gastro-Enterology and Proctology at the Eighty-Fifth Annual Session of the American Medical Association, Cleveland, June 15, 1934.

1. Wheelon, Homer: Observations on Gastric and Duodenal Motility in Duodenal Obstruction, J. A. M. A. **77**: 1404 (Oct. 29) 1921.
2. Kantor, J. L.: The Unstable Colon, South. M. J. **25**: 29 (Jan.) 1932.
3. Jordan, Sara M.: The Unstable Colon and Neurosis, J. A. M. A. **99**: 2234 (Dec. 31) 1932.

cause must be sought in an imbalance in the neuromuscular apparatus of the duodenum leading to a motor dysfunction and possibly also, to a certain degree, of a secretory dysfunction without evidence of organic disease.

ETIOLOGY

Duodenal motility may be disturbed, according to Sensenich,[4] without evidence of organic disease, as the result of mechanical, chemical, allergic, nervous or reflex causes.

In regard to the mechanical causes, aside from the congenital factors, the conditions favoring duodenal instability are adhesions and compression of the duodenum. Adhesions ordinarily involve the first and second portions of the duodenum. Especially important in this connection are adhesive processes coming as the result of chronic cholecystitis, adhesions between the duodenum and the hepatic flexure, and those formed as the result of visceroptosis or following abdominal operative procedures. Pressure on the duodenum producing this condition may result from spinal deformities as well as from growth involving abdominal organs such as the pancreas and from pressure due to ptosis of the right kidney. The chemical causes are manifested in the form of changes in the gastric secretion as well as from regurgitation of bile and duodenal contents into the stomach. This may be due to absorption of toxic material from duodenal contents retained as the result of disturbed motility in this portion of the bowel.

TABLE 1.—*Cases Arranged According to Age and Sex*

Age	Males	Females
20 to 30	27	8
30 to 40	31	7
40 to 50	15	5
50 to 60	5	0
60 to 70	1	0
70 to 80	1	0
Total	80	20

Gastro-intestinal symptoms due to food allergy are not uncommon, as Rowe,[5] Gay [6] and others have pointed out. Allergy has likewise been observed as a definite etiologic factor in certain instances of the unstable duodenum.

Derangement of the nervous system plays an important rôle in the production of this condition. It frequently arises in high strung nervous individuals and is especially noted during periods of overwork and fatigue, disappearing with rest and freedom from anxiety. In addition, general nervous symptoms such as headaches, palpitation, insomnia and depression are commonly present as evidence of its neurogenic origin.

It is interesting to note that the unstable duodenum is frequently of reflex origin, being the result of other disorders with which it is not uncommonly associated; of these, chronic cholecystitis with or without pericholecystic adhesions, cholelithiasis, gastric ulcer, chronic appendicitis and visceroptosis play an important rôle.

INCIDENCE

The material selected for this study of the unstable duodenum comprises a group of 100 cases. The highest incidence occurred between the twentieth and fiftieth years. Of the 100 patients, eighty were men and twenty women. It is evident, according to our observations, that this condition is far more frequent in males than in females. According to our experience, too, the unstable duodenum occurs far more frequently than a survey of the literature indicates.

SYMPTOMATOLOGY

The symptoms of the unstable duodenum are by no means characteristic. This condition may simulate duodenitis, duodenal ulcer, cholecystitis, appendicitis or other abdominal disorders. With the duodenitis or duodenal ulcer-like syndrome, symptoms of hyperchlorhydria are manifested with discomfort and postprandial pain. In other instances, when symptoms resemble those of cholecystitis, mild attacks of colic occur with tenderness in the gallbladder region. In others there is discomfort with localized pain in the lower right quadrant of the abdomen simulating appendicitis. There are some instances, however, in which the symptoms are quite atypical and in which the patient complains mainly of disturbed appetite, nausea, vomiting epigastric discomfort, and headaches. Abdominal pain is unusual, but when it does occur it is ordinarily mild in character.

The bowels are usually constipated, though intermittent diarrhea not infrequently replaces this condition. Duodenal stasis often of the intermittent type may be present and may account for certain symptoms. Owing to the patient's inability to consume a sufficient amount of food, loss of weight and strength is not unusual. Neurasthenic symptoms of a varied type are commonly present in the form of fatigue, depression, insomnia and irritability, adding further to the patient's discomfort. The symptoms associated with the unstable duodenum may occur in attacks with many periods of relief, extending over a considerable length of time during which the patient may enjoy comparatively good health.

In our series thirty-six cases presented symptoms suggesting duodenitis or duodenal ulcer, twenty-seven cholecystitis and twenty-two appendicitis. Loss of appetite occurred in fifty-six instances, nausea in twenty-three, vomiting in fifteen, epigastric discomfort in fifty-one, constipation in seventy-two, intermittent diarrhea in fourteen, duodenal stasis in twenty-four, and neurasthenic symptoms in sixty-eight.

REPORT OF CASE

The following history presents the most important features of a typical case of unstable duodenum simulating duodenal ulcer:

A. F., a man, aged 23, complained of indigestion for six months, consisting of discomfort and slight pain in the epigastrium, several hours following meals, which was relieved by the ingestion of food. The condition had recently became more constant and severe. The patient had lately complained of heartburn and acid eructations. He had always been greatly relieved of his symptoms by the ingestion of soda.

Physical examination revealed no abnormalities. Tenderness in the epigastrium was absent. The gastric analysis showed a definite hyperchlorhydria. On roentgen examination the duodenal cap was found extremely irritable, filling well at times and not at others, but no deformity of the duodenum was observed. Pylorospasm was marked. As no lesion could be detected, the diagnosis of unstable duodenum was made, which was confirmed by subsequent examination.

4. Sensenich, R. L.: Duodenitis and Motor Disorders of the Duodenum, J. Indiana M. A. **25**: 117 (March) 1932.
5. Rowe, A. H.: Roentgen Studies of Patients with Gastro-Intestinal Food Allergy, J. A. M. A. **100**: 394 (Feb. 11) 1933.
6. Gay, L. P.: Abdominal Allergy, J. Missouri M. A. **29**: 7 (Jan.) 1932.

DIAGNOSIS

The patient is frequently of the high strung irritable neurasthenic type and often complains of various nervous symptoms such as headache, dizziness, insomnia and exhaustion. Loss of flesh is not uncommon. Spastic states may frequently be observed in other portions of the gastro-intestinal tract, such as cardiospasm, pylorospasm, gastrospasm and spastic colitis, though in some instances, aside from the irritability of the duodenum, other involvements may be entirely absent.

The gastric analysis usually reveals an increased acidity. Occasionally, owing to the admixture of large quantities of bile, achylia may be present. Of the eighty-five cases in which gastric analyses were recorded, the gastric acidity was normal in twenty-nine; hyperchlorhydria was present in thirty-eight and hypochlorhydria and achylia in eighteen.

The diagnosis is usually extremely difficult from the symptoms alone. It should be suspected when in neurotic individuals symptoms of duodenal ulcer or cholecystitis or appendicitis occur which are not distinctly typical of these disorders. Such associations as the irritable or unstable colon, which was observed in fifty-one instances among our cases, is likewise suggestive of the presence of this condition. Of the associated conditions confirmed by roentgen examination in our cases, gastric ulcer was present in nine instances, chronic appendicitis in forty and cholecystitis in six. The liver was distinctly enlarged in four of our cases. It must, however, be borne in mind that many of these disorders may be definitely present as direct etiologic factors.

While the diagnosis is rarely possible from the history and physical examination, the roentgen evidence is far more conclusive. The roentgen signs of this condition are well defined and extremely characteristic, and a definite diagnosis can be made only by this procedure. These observations are based largely on fluoroscopic evidence by means of which changes in the form of the duodenal bulb as well as its motility can be carefully observed.

ROENTGEN STUDIES

The superior portion of the duodenum, also known as the cap or bulb, is the most frequent site in which the irritability manifests itself. The entire duodenum may present evidence of dysfunction, but in this study the irritability or unstable duodenal bulb alone will be considered. Normally the duodenal bulb fills and empties in a uniform rhythmic manner. It usually fills completely with ease and can readily be observed under the fluoroscopic screen. The contrast meal remains in the bulb only a few moments and then quickly spurts through into the second portion of the duodenum. During this interval the cap can be clearly visualized and a minute study made of its configuration and function. Any abnormality can thus be readily disclosed. In the milder types, slight variations from the normal are often difficult to interpret and may be overlooked. Frequently in the severe forms too, especially when there is extreme spasticity and irregularity, there is often doubt as to whether the condition is the result of an unstable bulb, a duodenitis or a duodenal ulcer.

The irritable bulb is characterized roentgenologically by the presence of (1) an increased motility with complete or incomplete emptying, (2) transient irregularities and fibrillation noted along the borders, (3) transient spastic manifestations, (4) tenderness and sensitiveness over the duodenum, and (5) absence of a definite ulcer filling defect.

MOTILITY

The changes in motility in the irritable bulb may vary greatly in intensity from the mildest to the severest forms. However, the duodenal cap does not always empty itself completely, even though the motility is markedly accelerated. This is quite characteristic of the usual case. In some instances, too, the bulb may

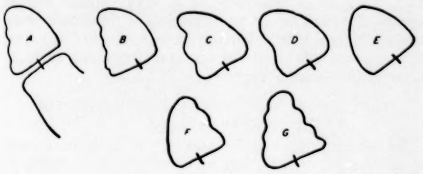


Fig. 1.—Diagrammatic outline, representing a group of fluoroscopic views, *A*, *B*, *C*, *D* and *E* illustrating the transient irregularities and fibrillation on the outer margin of the duodenal bulb. Note the shifting appearance with a return to normal bulb outline. *E* and *G* illustrate similar fibrillating irregularities on the inner margin.

empty so rapidly that it may become difficult to carry out the examination satisfactorily. At times the irritable cap may fill poorly, but ordinarily it becomes well filled. In none of the cases in our series was retention noted in the bulb but rather rapid emptying was most constantly observed. The bulb is often difficult to fill on account of the rather marked spasticity of the pylorus, which is by no means uncommon in this condition. Sluggish emptying of the cap was noted in only a small proportion of our cases.

Transient irregularities and fibrillation of the bulb occurred quite frequently and are of considerable importance in the diagnosis of the irritable cap. As an illustration, figure 1 presents this condition. The fibrillation is most clearly noted on the outer border and appears in the form of peristaltic waves moving in the direction of the second part of the duodenum. Under normal conditions fibrillations and peristaltic waves are rarely observed in the bulb, as this portion of the

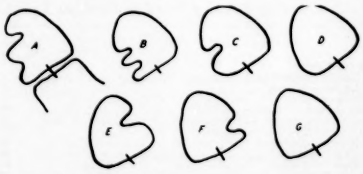


Fig. 2.—Tracings made from fluoroscopic views, *A*, *B*, *C* and *D* showing the transient spasticities on the outer margin of the bulb. *E*, *F* and *G* illustrate similar changes occurring on the inner margin. Note the shifting of the spastic defects, with return of normal bulb outline.

duodenum ordinarily empties in mass spurts. Slight transient irregularities are also noted in this condition, often producing a transient fringed appearance of the border of the cap. No violent peristaltic waves, however, could be detected and no antiperistalsis was observed in our series.

Shifting spastic manifestations of the bulb occurred in 13 per cent of our cases (fig. 2). These spastic changes are revealed roentgenologically as transient deep indentations, which occur on one or both borders of the

cap. They appear most frequently, however, on one border alone and notably the outer. Their resemblance to ulcer filling defects are often marked, but on account of their transient nature the presence of an ulcer can usually be eliminated. It must be borne in mind, however, that these changes may in some instances indicate the presence of ulceration without the typical defect. Great care should therefore be exercised in drawing conclusions. Occasionally an hour glass deformity of the cap is detected. Attention must be directed to the fact that, when spasticity of a very intense degree occurs, the presence of an ulceration or duodenitis must at least be considered, for the roentgenologic distinction between irritable duodenal cap and duodenitis or ulcer is often only one of degree.

TENDERNESS AND SENSITIVENESS OVER THE DUODENAL BULB

In most instances in the presence of the irritable cap, a definite persistent point of sensitiveness is noted in the region over the duodenal area. This tenderness is, however, usually mild in type and not infrequently only a discomfort is elicited on palpation under the fluoroscopic screen.

ABSENCE OF AN ULCER FILLING DEFECT

We have not included in our study of the irritable duodenal bulb any cases in which the slightest evidence of a filling defect could be demonstrated or in which there was the least suggestion of ulceration; in fact, every roentgenologic and clinical precaution was undertaken to exclude such a possibility.

DESCRIPTION OF THE IRRITABLE DUODENAL BULB

The size and density of the duodenal bulb is usually normal; the shape in most instances is of the cone type and the margins are clearly and sharply defined. Elongation occurs but rarely. The reticular network and granular appearance of the duodenal bulb commonly observed in duodenitis is not noted in the unstable duodenum. The capacity of the duodenum may or may not be diminished. When completely filled, it has in all respects the roentgenologic appearance of a normal bulb.

TABLE 2.—*Duodenal Changes Found by Roentgen Examination*

	Occurrence in No. of Cases
Duodenal bulb:	
Normal emptying	2
Rapid emptying	92
Slow emptying	6
Spastic duodenal bulb	13
Transient irregularity and fibrillation of the duodenal bulb	42
Second portion of the duodenum:	
Normal emptying	18
Rapid emptying	58
Slow emptying	24
Duodenal stasis	18
Redundant duodenum	5
Duodenal diverticula	5

In the study of the irritable duodenum, such disorders as duodenitis and duodenal ulcer must be excluded.

In duodenitis the presence of the irritable bulb is likewise a characteristic finding. According to Kirklin,[7] four roentgen signs are observed in this condition: (1) irritability of the bulb, (2) unstable deformity producing a mucosal pattern of a coarse irregular reticular appearance attributed to spastic contractions of its muscularis, (3) absence of an ulcer crater and (4) absence of gastric retention. In our study of the irritable duodenal bulb, not all these characteristics could be demonstrated. We did observe rapid emptying, transient fibrillating irregularity along the margins and transient spastic manifestations. These signs, however, were not constant throughout the examination, the bulb appearing prefectly normal in all instances during some period of the investigation. The characteristic mucosal pattern, such as lessened density and reticular granular network of the bulb described by Kirklin, is not observed in this condition. However, it must be recognized that in some instances it may be extremely difficult to differentiate the two conditions.

TABLE 3.—*Gastric Changes Found by Roentgen Examination*

	Occurrence in No. of Cases
Gastric peristalsis:	
Normal	68
Sluggish	11
Active	21
Gastric retention	2
Gastrospasm	1
Gastric ulcer	9
Pylorospasm	42

The presence of duodenal ulceration must likewise be eliminated; this may become difficult, especially when the clinical manifestations point directly to this disorder. The transient roentgen signs are ordinarily sufficient to rule out this condition, but even here the slight bulbar manifestations might occasionally indicate extremely early changes as the precursor of an ulcer that has not as yet fully developed.

On the other hand, according to our experience with the unstable duodenum, there is frequently an associated generalized irritability and instability of the entire gastro-intestinal tract, indicating that this condition does not possess the localized characteristics observed in ulcer. In a few instances, however, duodenal ulceration not recognized at first was found in subsequent roentgen reexamination.

Other coexisting duodenal abnormalities, such as diverticula, redundance, adhesions and stasis, were also noted. These appear in table 2. The second part of the duodenum also presented frequent changes in motility. Marked indications of irritability of the bulb are known to occur as the result of abnormal conditions present in the distal segment of the duodenum. A low grade stasis in the distal duodenum is likewise a common cause of this dysfunction.

Duodenal adhesions secondary to gallbladder infections producing signs of right upper quadrant adhesions occurred in 33 per cent of our cases. The presence of adhesions as a cause of this dysfunction is rather significant.

Gastric changes may likewise occur. The motility of the stomach as a rule is not unduly interfered with, retention occurring in but two cases of our series as the result of spasm. Gastric peristalsis is usually normal. Associated evidence of gastric disease was noted in nine instances in the form of ulceration (table 3). Spasticity of the pylorus is observed with striking frequency in this disorder; it was present in 42 per cent of our series. The roentgen ray revealed pathologic changes in the appendix in 40 per cent, and it is evident that the irritable duodenum in these instances is of reflex origin.

The spasticity of the pylorus and the irritability of the duodenal bulb and duodenum, together with the

7. Kirklin, B. R.: A Roentgenologic Consideration of Duodenitis, Radiology **12**: 377 (May) 1929; Duodenitis and Its Roentgenological Characteristics, Proc. Staff Meet., Mayo Clin. **8**: 629 (Oct. 18) 1933.

frequent association of the irritable colon, suggests rather clearly that the entire gastro-intestinal tract may often be involved in this dysfunction.

The frequent simultaneous occurrence of adhesions or chronic appendicitis or colitis or gallbladder disorders as well as other intra-abdominal conditions that were noted in our series of cases is evidence, at least in many instances, of its reflex origin (table 4).

TREATMENT

The treatment of the unstable duodenum is usually satisfactory in most instances. This should be directed toward a restoration of this part of the bowel to its normal tone, which is best accomplished largely by means of diet, rest and improvement of the nervous system. As Jordan has pointed out, "the unstable colon can be due to a specific irritation of the neuromuscular apparatus of the colon without the involvement of the nervous system as a whole"; and so here too irritation from indigestible food, abuse of alcohol and excessive use of condiments as well as laxatives may play a rôle in the production of the irritable duodenum in some instances. On this account all irritating foods and remedies should be omitted. The food should consist ordinarily of an acid free bland diet of high caloric and high vitamin value. It should be taken in moderate amounts and given at regular and frequent intervals. At first, absolute rest in bed may be required for some weeks. As soon as improvement occurs, this may be reduced, though rest of half an hour following meals should be insisted on for a considerable length of time. In severe and intractable cases, duodenal lavage and feeding may be resorted to with great benefit. Special attention must be directed to the nervous system in those instances in which neurasthenic manifestations are prominent. Psychotherapy plays an important rôle in this regard.

When the condition is the result of such reflex causes as gastric ulcer, chronic appendicitis, cholecystitis or adhesions, treatment must necessarily be directed to the primary disorder. When hyperchlorhydria is present, frequent feedings and the moderate use of alkalis are indicated. Belladonna or atropine are efficient remedies in overcoming spasm. The use of cold or ice applications over the region of the duodenum will often afford temporary relief.

TABLE 4.—*Involvement of Other Structures*

	Occurrence in No. of Cases
Cholecystitis and cholelithiasis	6
Duodenal adhesions involving the right upper quadrant	33
Chronic appendicitis	40
Irritable colon	51

SUMMARY

The irritable or unstable duodenum occurs more commonly than a survey of the literature would indicate. The condition has as yet not been clearly defined, and considerable confusion still exists concerning its significance. The term "unstable" is suggested, since at times a decreased rather than an increased irritability is observed. The underlying cause is to be found in a disturbance of the neuromuscular mechanism of the duodenum, which may be the result of mechanical, chemical, allergic, nervous or reflex causes.

In a study of 100 cases of the unstable duodenum, the condition was found more frequently in males than in females and more commonly between the twentieth and fortieth years. The symptoms are by no means characteristic and the condition may simulate duodenal ulcer, cholecystitis, appendicitis or other abdominal disorders, though these may be actually present as direct etiologic factors. Nervous and neurasthenic manifestations are usually prominent. Gastric hyperchlorhydria is more commonly present.

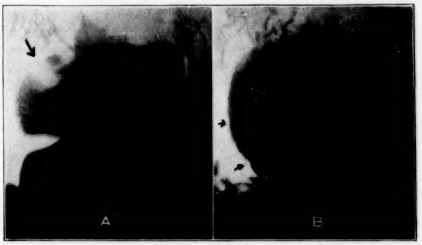


Fig. 3.—*A*, a deep spastic defect is shown on the outer border of the bulb, at arrows. *B*, same case, illustrating the duodenal bulb completely filled, with slight irregularity on the outer margin. Note the absence of the spastic defect.

Evidences of instability and spastic states in other portions of the bowel are quite frequent. The diagnosis is definitely established by means of roentgen evidence. This consists in the detection of increased motility, transient irregularities and fibrillations, spastic manifestations and sensitiveness over the duodenum, together with an absence of an ulcer filling defect in this area.

The treatment must be directed to a restoration of the duodenum to its normal tone, which is best accomplished by means of diet, rest and improvement of the nervous system. In severe cases, duodenal lavage and alimentation may be resorted to with benefit. When this condition is the result of reflex causes, treatment must be directed to the primary disorder. Belladonna and atropine are effective remedies in relief of spasm.

1013 North Charles Street.

ABSTRACT OF DISCUSSION

DR. ELMER L. EGGLESTON, Battle Creek, Mich.: In this paper attention is called to the unstable or irritable duodenum, the symptomatology of which is quite varied and at times difficult to differentiate from biliary tract disease or acute duodenal ulcer. May I suggest that this so-called irritable duodenum, in a considerable proportion of cases, may be the result of a rapid emptying upper gastro-intestinal tract noticed when there is a disturbed vegetative nervous mechanism. The reference to the confusion of thought relative to both the irritable or spastic duodenum and the spastic colon is well taken, but opinion relative to the spastic or irritable colon is being clarified, and I believe there is a general agreement that the irritable colon is a result of an undue parasympathetic enervation of the distal colon. Fluoroscopic observation of a vagotonic individual reveals a rapidly emptying stomach, probably in less than half the normal time. The contents are highly acid with a high peptic activity, and if there is stasis in the duodenum, injury is likely to result, with symptoms not unlike those the authors mentioned. The authors call attention to a disturbed nervous mechanism but do not definitely designate the character of the derangement. My impression is that this unstable nervous state is responsible for the greater part of the functional disturbances of the gastro-intestinal tract and

possibly constitutes a decided predisposing cause of peptic ulcer as well. There are, no doubt, other factors, such as adhesions and disturbances in the biliary tract, that may be active as causes of the irritable or unstable duodenum. The picture may be due to a nervous instability, an undue parasympathetic enervation that occurs with undue emotional stress, overtenseness of the individual who is attempting to attain success by application over too long periods of time with too little sleep. The conception of gastro-intestinal disorders must not be based on dietetic disorders or focal infections alone. It must be recognized that disordered nervous states may be the principal causative factor.

DR. JOHN G. MATEER, Detroit: Drs. Friedenwald and Feldman should be congratulated for contributing to our knowledge of the duodenum. Gastro-enterologists and roentgenologists are agreed that too little attention has been directed toward duodenal abnormalities. Those who have had experience in gastro-intestinal fluoroscopy will agree with the authors' roentgen criteria of the unstable or irritable duodenum. Emphasis should be placed on the transient character of the localized irregularities of the duodenal cap, the tenderness noted so frequently on palpation of the bulb, and the generalized spasm and rapid emptying, which lead to temporary difficulty in satisfactory visualization of the bulb. These spastic phenomena of the unstable duodenum, with the transient irregularity of the cap, can be easily differentiated, as a rule, from the persistent spasm defect of duodenal ulcer. It is common knowledge that the bulbar deformity of the unstable duodenum disappears if the patient is given atropine or belladonna up to the physiologic limit. Furthermore, this type of deformity also disappears frequently with gentle manipulation of the cap or if one waits and observes the patient fluoroscopically a second time; e. g., fifteen or twenty minutes after receiving the barium meal. The authors' observation of the fluoroscopic evidence of increased or decreased irritability in the second and third portions of the duodenum should also be emphasized. In patients with an unstable duodenum one may see active peristalsis sweeping along the entire course of the duodenum in some cases and, in others, temporary stasis of barium in the second and third portions of the duodenum. Those cases showing temporary stasis in the distal portion of the duodenum are of particular interest. This transient stasis can be differentiated readily, as a rule, from the stasis of chronic duodenal ileus by the absence of the three fluoroscopic requirements for the latter diagnosis, viz., marked and persistent delay in emptying, definite dilatation of the duodenum, and antiperistalsis, these changes persisting when the patient is examined in different positions. Furthermore, the marked character of the symptoms of reverse peristalsis, which accompany a true duodenal ileus, afford further differentiation. As to the symptomatology of the unstable duodenum, the authors found epigastric discomfort in 51 per cent of their cases, frequently in association with the symptoms of an unstable or irritable colon. I should like to ask Drs. Friedenwald and Feldman whether they feel that the abnormal duodenal irritability constitutes an etiologic factor in the production of this common type of functional epigastric distress, which has usually been attributed to pylorospasm, and the conditions resulting from it.

DR. SARA M. JORDAN, Boston: It seems to me that what has been presented concerning the irritable duodenum applies also to what has in the past been called the irritable colon, and I wonder whether physicians haven't localized a little bit too definitely in the consideration of the irritable or unstable colon. Certainly evidences of the same symptoms that are here described as being caused by the irritable duodenum are found. Is it not perhaps then a question of irritability or instability—all terms are rather unsatisfactory—of the whole digestive tract, of which pylorospasm, this condition in the duodenum, and probably many other conditions in the rest of the small intestine not yet observed, plus the irritable condition in the colon, are all integral factors? I should like Dr. Friedenwald's and Dr. Feldman's opinion about that.

DR. MAURICE FELDMAN, Baltimore: Regarding Dr. Eggleston's remarks about the emptying time of the stomach, it was of interest to note that in this condition we did not observe an unusually rapid emptying. In the majority of cases the stomach emptied in normal time, though in some instances it did empty more rapidly. Regarding Dr. Mateer's remarks about atropine and belladonna relieving symptoms, we have found these drugs to be of value. We have also found that on repeated examinations, which we have made in a number of instances, the irritable duodenum was not constantly present. The association of pylorospasm with irritable duodenum and irritable colon, as Drs. Mateer and Jordan referred to, was very striking. For instance, in our series of 100 cases there were forty-two cases of pylorospasm and fifty-one cases of irritable colon. It occurred to us as well that we were dealing not merely with a local duodenal involvement but perhaps with a more general condition.

CONGENITAL PSEUDARTHROSIS OF THE LEG

THREE CASES TREATED BY MASSIVE BONE GRAFT

PAUL C. COLONNA, M.D.
NEW YORK

The so-called congenital pseudarthrosis of the bones is an interesting and rather rare type of fracture. Wade [1] and Inglis [2] of Australia have made important contributions to this subject, but it is in the Italian and French medical literature that the greatest attention is devoted to it. In the American literature the most noteworthy contribution is by Henderson,[3] who in 1923 called attention to the condition and in 1928 reported seven cases. It is not merely a fracture that fails to unite but a pathologic condition in the bone or bones, causing weakness and subsequent fracture. There have been reports of congenital pseudarthrosis of the clavicle, ulna and femur, but the bones of the leg are by far the most frequent site of the lesion.

The most satisfactory grouping would appear to be that of Codivilla,[4] who has classified the cases under three headings: (1) those in which the usual anterior angular deformity exists without fracture, (2) those presenting a typical pseudarthrosis, and (3) those pseudarthrosis cases in which more or less loss of bony substance is accompanied by marked deformity.

Even before fracture has occurred, definite changes may be observed in the bone in which the fracture will subsequently occur. In this early phase of the condition there may be noted an anterior curving of the leg in its lower half. A superficial examination may confuse the deformity with that found in congenital absence of the fibula, although in the latter condition there is a definite pattern of deformity, consisting of a dimpled scar over the summit of the curve, a pes equinus and an absence of the fourth and fifth toes without any weakening of the integrity of the tibia. The roentgenographic appearance of the bones in these early cases of congenital pseudarthrosis before fracture has occurred presents a typical and characteristic picture. There can be noted an area or areas of rarefied bone, commencing in the region of the periosteum and extend-

Read before the Section on Orthopedic Surgery at the Eighty-Fifth Annual Session of the American Medical Association, Cleveland, June 14, 1934.

1. Wade, R. B.: The So-Called Congenital Pseudarthrosis of the Tibia, J. Coll. Surg., Australia **1**: 181-193 (Nov.) 1928.

2. Inglis, K.: Pathology of Congenital Pseudarthrosis of the Tibia, J. Coll. Surg., Australia **1**: 194-207 (Nov.) 1928.

3. Henderson, M. S.: Nonunion in Fractures: The Massive Bone Graft, J. A. M. A. **81**: 463 (Aug. 11) 1923; Pseudarthrosis of the Tibia in Children, J. Bone & Joint Surg. **7**: 340 (April) 1925; Congenital Pseudarthrosis of the Tibia, J. Bone & Joint Surg. **10**: 483-490 (July) 1928.

4. Codivilla, A.: On the Care of the Congenital Pseudarthrosis of the Tibia by Means of Periosteal Transplantation, Am. J. Orthop. Surg. **55**: 163 (Oct.) 1906.

ing partly or completely throughout the whole diameter of the bone in the region of its lower third. It suggests a local osteitis fibrosa cystica, and a certain amount of movement may be obtained in the bone at this point, even in the absence of fracture, owing to the impairment of the bony structure. There is this notable exception, however, that in true osteitis fibrosa cystica solid bony union following fracture is not delayed. Wade has reported four cases of congenital pseudarthrosis in which fracture was incomplete and the union very slow, there being no obvious callus thrown out. In one patient he reports that the union was soft after being splinted for a period of six years. If, however, fracture occurs, an increase of the deformity is most likely to develop.

The type most commonly seen is one in which a frank pseudarthrosis is present in both bones, with a characteristic angular deformity of the lower third of the leg, as shown in the accompanying illustrations. In the older cases the proximal bone ends are pointed and sclerosed while the distal fragments are frequently cup shaped with a varying degree of definite absorption between the bone ends, this space at operation being found filled with dense avascular tissue.

The Wassermann reaction was negative in the cases here reported, which fact coincides with the observations presented in other case reports.

There is considerable divergence of opinion regarding the etiology of the condition. Potel [5] recognizes an initial curvature of the bone but feels from his cases that the bone is unaltered in structure. Roentgenograms of the cases reported by Wade show a definite cystic area at which fracture later occurred, and this finding may be noted in two of the cases here reported. Basseta [6] has reported the examination of a fetus, 14 weeks old, presenting an early prefracture stage in which was found a blood clot between the ends of the bone consisting of a net of fibrin and a few stellar connective tissue cells. The effect of amniotic pressure in the development of this condition has been mentioned by several authors, but in opposition to this it would seem unlikely that the stigmas of pressure would be on the knee and foot and not be manifested at the apex of the curve. Codivilla and Henderson express the belief that the condition is probably due to a lack of embryonal development and assume that a congenital interference with the lack of development of the nutrient artery would explain it. Frattin [7] believed that intra-uterine pressure due to amniotic cords or adhesions might be a factor.

All observers have commented on the fact that the general condition of these patients is usually good, and whatever may be the factor or factors it must be a local one. Codivilla states that the ample collateral blood supply in the upper portion of the leg is a factor in explaining why the congenital pseudarthrosis is always found in the lower half of the leg. However, Dillehunt and LeCocq [8] report a case of this condition occurring in the upper third of the leg with a successful bony union following operation at the early age of 2½ years. This was the youngest patient in whom a successful outcome followed operation.

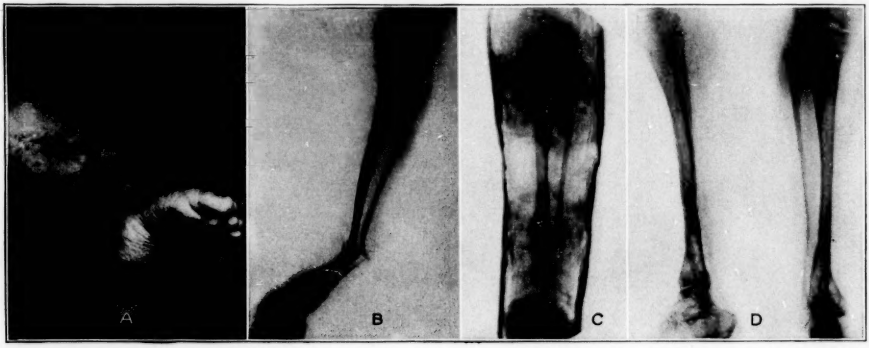


Fig. 1 (case 1).—*A*, condition before operation; *B*, preoperative appearance of pseudarthrosis; *C*, massive bone graft in position; *D*, appearance after solid bony union.

Kenwell [9] has reported a case in which there was present also distinct blueness of the sclera and in which osteogenesis imperfecta was therefore considered. Roentgen examination and autopsy failed to reveal other fractures, but it was felt that the condition was a purely local manifestation and not a type of osteogenesis imperfecta. Inglis feels from a pathologic study of three cases that probably the centrally situated connective tissue represents marrow which was once normal and later became fibrotic, or that originally the medullary canal was occupied by connective tissue which was mainly fibrous, normal marrow being inconspicuous or absent.

The second case here reported was marked by an interesting feature. This boy was only 5 years of age when admitted to the Hospital for the Ruptured and Crippled, but even at that age he had been subjected to several unsuccessful attempts at bone grafting. While in the hospital several other unsuccessful attempts by the use of massive bone grafts were made. The

5. Potel, G.: Traité pratique d'orthopédie: Courdures et pseudarthroses des os de la jambe, 1925, pp. 74-81.
6. Basseta, quoted by Henderson.[3]

7. Frattin, G.: Curvature e pseudoartrosi della tibia de origine congenita, Arch. di orthop. **26:** 461, 1909.
8. Dillehunt, R. B., and LeCocq, J. F.: Pseudarthrosis of the Tibia in Young Children, J. A. M. A. **90:** 1615-1617 (May 19) 1928.
9. Kenwell, H. N.: A Case of Congenital Fracture of the Leg Associated with Many Other Important Anomalies, Buffalo General Hospital Bull. **3:** 29 (No. 2) 1925.

patient was discharged home between operations and at two separate times, about six months apart, fractured the tibia in its middle third on the sound leg. These fractures healed in the usual way with the presence of normal appearing callus and have remained healed to date. The normal bony structure was restored, while the dissolution and absorption of the transplanted graft on the affected leg continued. This, it would seem, is strong evidence in favor of the congenital pseudarthrosis being a local rather than a general manifestation.

Therefore, the essential part of the pathologic condition seems to be a centrally situated connective tissue, which is partly fibrous and partly fibroblastic, occupying usually the lower third of one or both bones of the leg and initiated by a congenital lack of development of the nutrient artery.

TREATMENT

Of all the various procedures advanced for the treatment of this condition, operation is the only one that need be considered, and certain restrictions should be noted in the selection of cases and the type of operation employed. Codivilla practiced the use of a cutaneous osteoperiosteal pedunculated graft, swung over from the sound side to the pseudarthrosis, and others have suggested shortening the leg sufficiently to obtain approximation and apposition of the fragments. However, the osteoperiosteal graft, the inlay method of bone grafting, or the massive bone grafting method proposed by Henderson would appear to be the methods of choice at the disposal of the operator. Whatever method has been pursued, failure has been frequent, and I myself have preferred the massive bone graft advocated by Henderson.

REPORT OF CASES

CASE 1 (fig. 1).—F. F., aged 11 years, seen at Bellevue Hospital in September 1929, complained of deformity of the right leg. The parents stated that the child's leg had been crippled since birth. There was no similar family history. The patient wore a brace on the leg until the age of 7, at which time the first operation for bone grafting was done. In all, the patient had had four unsuccessful attempts to produce union by bone graft operations, the last done about a year before.

On examination the child was in good general condition, wearing a brace on the right leg, presenting marked shortening of this limb and being somewhat overweight. Blood chemistry studies were negative for any change in the blood calcium and phosphorus. The leg, on its anterior and lateral aspects, presented long healed scars as results of previous operations, and there was an obvious pseudarthrosis in the lower third of the leg. There was very little angulation present, but the curved and deformed fibula ends could be felt protruding just under the skin. There was no evidence of nerve injury.

The patient was admitted, October 2, to the Orthopedic Service at Bellevue Hospital and was operated on, October 8. At operation the pseudarthrosis area was found filled with dense avascular connective tissue and the tibia and fibula bone ends were excised well above the area of pseudarthrosis. A large bone graft was removed from the opposite tibia and, after the right tibia was prepared for its reception, it was snugly placed in position and held there by kangaroo tendon. Bone chips were packed about the graft. No attempt was made to insert a graft into the fibula. The wound was closed without drainage and, in order to prevent undue tension on the graft, the foot was placed in an attitude of slight equinus. The postoperative course was uneventful and, six weeks after the original operation, definite evidences of bone repair could be noted in the roentgenograms. At this time the plaster was changed and an open zigzag tenotomy of the heel cord accomplished. Plaster was reapplied from the toes to the groin with the foot at right angles. Subsequent roentgenograms showed the process of bony union progressing satisfactorily, and the plaster support was removed from the leg six months after operation. The patient was fitted with a leg brace accompanied by a long leather cuff. At the present time the patient is able to walk about without support but prefers to wear a brace when playing. Solid bony union, as shown, has resulted.

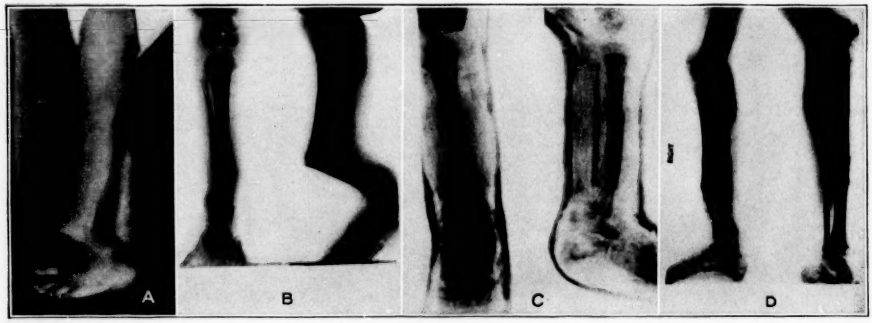


Fig. 2 (case 2).—*A* and *B*, characteristic right angular deformity of the lower third of the leg; *C*, massive bone graft in place; *D*, normal healing of fracture of the opposite tibia coincident with absorption of the massive bone graft at the site of pseudarthrosis.

CASE 2 (fig. 2).—J. G., a boy, aged 5 years, had fractured the right leg when he was an infant. After several unsuccessful attempts at healing by immobilization in plaster, open operations were done at another hospital and an attempt was made to produce union at the site of ununited fracture of the tibia and fibula in its lower third. As this was unsuccessful he was fitted with a brace, which he has worn from the time he was first seen at the clinic at the Hospital for the Ruptured and Crippled.

Examination at that time showed marked deformity, as noted in figure 2. There was a long scar on the anterior aspect of the lower third of the leg, and another in the region of the achilles tendon as a result of previous operation. At the right angle angulation at the lower third there was a pseudarthrosis, and a roentgenogram showed nonunion of the right tibia and fibula at the junction of the lower third, with much loss of bone substance in the fibula, so that there was no contact of the fragments. The right tibia measured 8¼ inches (20.5 cm.) and the left 9¼ inches (23.5 cm.).

The patient was admitted to the hospital for preliminary stretching and bone graft operation.

At the first operation, Jan. 27, 1930, there was found to be a large amount of scar tissue around the point of pseudarthrosis. With bone forceps the bone was divided at about

1 inch above and 1 inch below the pseudarthrosis and completely removed, after which the angulation could be corrected. A large massive bone graft was taken from the anterior aspect of the left leg, removed with the aid of a motor saw, and held in place in the prepared bed in the opposite side by three kangaroo tendons. Another incision was made over the outer aspect of the leg on the right, and the two ends of the fibula were exposed, which were separated about 1½ inches. A long sliver of bone was removed from the outer aspect of the fibula and the sharp end driven in the distal fragment and held by kangaroo tendon. Plaster was applied from the toes to the groin.

After an uneventful convalescence, subsequent roentgenograms showed no evidence of bone repair. Gradual absorption of the bone graft occurred.

At a second operation, October 6, an incision was made over the anterior aspect of the right leg and a definite pseudarthrosis could be demonstrated in the region corresponding to the distal end of the old graft to the proximal end of the tibia. The false joint was opened and thoroughly curetted. A sliding bone graft was made and the whole was held firmly with circular sutures of chromic catgut. One-half teaspoonful (2 cc.) of calcium phosphate was placed about the site of fracture and the wound closed in layers. Plaster was applied from the toes to the groin, the fragments being in good alinement.

Following this operation the wound broke down slightly and serum was discharged from the lower third of the leg with no evidence of infection. Clinically and from roentgenologic evidence, no union occurred following this operation. After a limited amount of weight bearing had been permitted, the child returned home in plaster.

The case was followed in the clinic for a long period and on Sept. 21, 1931, a third bone graft operation for congenital pseudarthrosis was performed, massive bone graft from the opposite leg being used for the ununited tibia. No attempt was made to treat the nonunion of the fibula at this time.

Satisfactory union did not follow this operation, and on November 14 the patient was admitted to the hospital because of a fracture of the tibia on the left side, which had been produced by a fall. The fragments were in good position. A plaster bandage was applied to this leg. It is interesting to note that, following the fracture on the opposite side, marked callus quickly developed and firm bony union rapidly followed. He continued to wear plaster and a brace on the right limb. An angulation deformity slowly developed at the site of the pseudarthrosis.

He was therefore admitted, May 4, 1932, and at his mother's request amputation was done below the knee. The wound healed by first intention and the patient was later fitted with a satisfactory artificial limb.

June 6, he was readmitted to the hospital because of the fracture of both bones of the leg on the left, at the junction of the upper and middle thirds, received by the patient jumping from the cupboard. The fragments were in good position and a plaster was applied. It was noted at this time that there was firm bony union at the site of the traumatic fracture received on this leg previously, and callus quickly developed about the site of the fracture of the upper third of the left leg.

The last report, March 15, 1934, shows that the boy is walking about with the aid of an artificial limb on the right and that the fractures of the left tibia have healed with solid bony union.

This case, therefore, is one which, in spite of repeated attempts at bone grafting in a child about the age of 6 years, resulted in failure in each case at the site of the congenital pseudarthrosis, while the opposite leg received two fractures, both of which healed normally. This would seem to support the view that the pseudarthrosis is produced by some local phenomenon, probably an interference with the normal circulation.

CASE 3 (fig. 3).—E. L., a boy, aged 10 years, was seen, Nov. 5, 1932, on account of shortening and deformity of the left leg. The child's birth was apparently normal but shortly afterward the father noticed that the leg was deformed and diagnosis of fracture of the leg was made by a local physician. Reduction was accomplished and plaster applied, but the bones did not unite. The child had had five open operations with attempts to produce bony union of the left tibia and fibula. He had a scar over the anterior aspect of the opposite leg as a result of a previous bone graft being done.

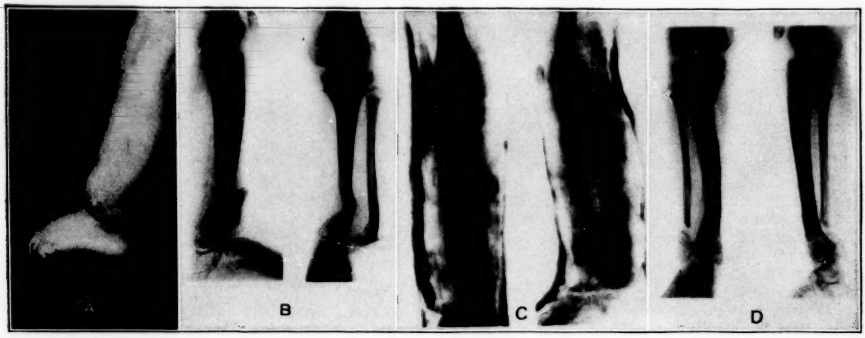


Fig. 3 (case 3).—*A*, condition before operation; *B*, preoperative appearance of pseudarthrosis; *C*, massive bone graft in position; *D*, appearance after solid bony union.

On examination the boy presented deformity as noted in figure 3, with anterior angulation and pseudarthrosis of both bones in the lower third. The tibial fragments were not in contact. The length of the right tibia was 11¼ inches (28.5 cm.), and of the left was 7¼ inches (18 cm.). The child was fitted with a brace and walked about for the next few months.

Jan. 23, 1933, a massive bone graft operation was done. With the aid of rongeurs the pseudarthrosis was removed, embracing possibly 1 inch of the proximal and one-half inch of the distal fragment, and then with the aid of a motor saw a large bone graft was removed from the opposite tibia and placed in the prepared bed, being held securely by kangaroo tendon. The pseudarthrosis of the fibula was likewise removed, and bone chips were packed in the gap. The wound was closed in layers and plaster bandage applied from the toes to the groin. Postoperative roentgenograms show an increasing amount of callus formation with the bones in good alinement.

Six months after the operation there was firm solid bony union. The shortening on the affected side was treated by having the boy wear a patten.

In these three cases a massive bone graft was employed, all of which presented the typical angulation and deformity with forward bowing in the lower third of the leg and pseudarthrosis. All the children had been repeatedly operated on without success. This brings up the subject of the age when bone grafting should be attempted. Henderson in 1924 stated that "the response of these patients to surgery after puberty is much more satisfactory" and recommended careful improvement of the general health, local physical therapy and a walking caliper splint as preliminary to any operative procedure. In the three cases reported in which a massive bone graft was used, the patients had all been subjected to three or more previous bone grafting operations with subsequent failure, and, in the second case, bony union was never obtained, amputation finally being done at the insistence of the mother. In the two other cases successful union followed, one child being 11 years of age and the other 10. It is felt that subjecting a patient under the age of 8 years to this type of operation is most likely to result in failure of solid union and that, up to this age, support with plaster or a brace and general hygienic treatment would be the wiser course to pursue.

SUMMARY

1. The condition of congenital pseudarthrosis has been rarely reported in the American literature.

2. The condition of congenital pseudarthrosis of the leg would appear to be a local rather than a general cause and to occur usually in the lower third of the leg.

3. The bone or bones involved present a characteristic roentgenographic appearance of a cystic formation, which pathologic condition precedes fracture and somewhat resembles a localized osteitis fibrosa cystica. The deformity is present at birth and fracture occurs either at or shortly after birth, hardly ever healing spontaneously.

4. Under the age of 8 years, operative treatment is not indicated and the chances for success by operation increase with the age of the patient.

5. The massive bone graft technic, as recommended by Henderson some years ago, was the method employed in the three cases here reported, in two of which (66⅔ per cent) bony union was obtained.

59 East Fifty-Fourth Street.

ABSTRACT OF DISCUSSION

DR. PHILIP LEWIN, Chicago: This is a very interesting and baffling condition. The pathologic changes are evidently purely local and they are undoubtedly predetermined by a peculiar embryologic twist, which permits the interposition of soft tissue. The literature on this subject is not large. The most important articles in English were written by Henderson and Wade. There is evidently a local metabolic bone lesion the nature of which may be cystic. The bowing in these cases may be primary or secondary. The importance of the nutrient artery in some cases is considerable. Dr. Colonna's results would indicate that his method of treatment is worthy of further trial. It is my belief that, as further progress is made in the treatment of this condition, the age at which operation will be indicated will be lowered. The important points are wide excision of pseudarthritic areas and the application of a double-wedge graft with osteoperiosteal and chip graft and some bone marrow.

DR. PAUL CRENSHAW COLONNA, New York: I should like to agree with Dr. Lewin that with more general use of the massive bone graft and improvement in technic the age period for attaining union may be lowered. I hope it will prove to be so. I think it is interesting, though, that the cases that have defied attempts at successful bone grafts have all been in this lower age group.

REGIONAL (TERMINAL) ILEITIS: ITS ROENTGEN DIAGNOSIS

JOHN L. KANTOR, M.D.
NEW YORK

This is a preliminary communication based on a review of six private cases[1] that came to surgical exploration in the last six years. In four of these the operation was performed by Dr. A. A. Berg and the pathologic examination was made by Dr. Paul Klemperer at the Mount Sinai Hospital. All these cases were finally diagnosed nonspecific ulcerative granulomatous inflammation of the terminal ileum according to the criteria presented by Crohn and his collaborators in 1932.[2] In the remaining cases operation was done elsewhere and before the term "regional (terminal) ileitis" was introduced in the literature. Nevertheless, these descriptions also agree on the presence of ileac thickening and ulceration, and on the absence of new growth, tuberculosis and other known specific inflammation or tumefaction. It therefore seems fair to assume, at least for the purpose of this preliminary communication, that a homogeneous group of cases is being dealt with. A summary of the chief clinical features in these patients is presented in table 1.

Fig. 1.—Normal ileocecal filling. Film taken five hours after opaque meal with patient in the prone position. There is no filling defect anywhere in the course of the barium column from its "tail" in the terminal ileum to its "head" at the splenic flexure of the colon. Note particularly the position, shape and general symmetry of the terminal loop of ileum.

Read before the Section on Gastro-Enterology and Proctology at the Eighty-Fifth Annual Session of the American Medical Association, Cleveland, June 13, 1934.

1. In all the cases here described, the disease involved only the terminal ileum. There is increasing evidence that other parts of the alimentary tract may be affected (Harris, Bell and Brunn,[12] Crohn and his associates [2]).

2. Crohn, B. B.; Ginzburg, Leon, and Oppenheimer, G. D.: Regional Ileitis: A Pathologic and Clinical Entity, J. A. M. A. **99**: 1323-1329 (Oct. 15) 1932. Crohn, B. B.: The Broadening Conception of Regional Ileitis, Am. J. Digestive Dis. & Nutrition **1**: 97-99 (April) 1934.

V 19

ROENTGEN INDICATIONS OF REGIONAL ILEITIS

The present status of roentgenology of the small intestine may be compared to that of the stomach twenty years ago. Despite the contribution of Mills,[3] Cole[4] and his collaborators, Case, Soper,[5] Lawrason Brown, Ritvo,[6] Raiford,[7] Bloom,[8] and Goldfarb[9] in this country, it is probably true that this branch of gastro-intestinal

Fig. 2.—Regional (terminal) ileitis. Same case as in figure 3. Film six and one-half hours after opaque meal. *A*, dilated ileac loops (obstruction); *B*, filling defect of terminal ileum; *C*, abnormal last filled loop of ileum; *D*, "string sign"; *E*, deformed cecum (spasm).

roentgen diagnosis is not very widely practiced; hence the following description of the technic used by me may not be out of place:

1. The standard opaque meal is employed. It is administered on an empty stomach.

2. All roentgenograms are made with the patient prone, the rays being directed dorsoventrally. This posture is preferred to the erect position because in the former the ileac loops are more widely separated.

3. Observations are made at hourly intervals from the period just before the cecum fills to the normal period of ileac emptying. This means from three to nine hours after the ingestion of the opaque meal.

4. The patient is allowed to take an ordinary meal as soon as the stomach is seen to be empty. This takes place normally five hours after the barium meal.

3. Mills, R. W.: X-Ray Evidence of Abdominal Small Intestinal States Embodying an Hypothesis of the Transmission of Gastro-Intestinal Tension, Am. J. Roentgenol. **9:** 199-225 (April) 1922.
4. Cole, L. G.: The Small Intestine, Tr. Am. Gastro-Enterol. A., 26th Ann. Meet., Washington, 1933, p. 240.
5. Soper, H. W.: Roentgen Diagnosis of Lesions in the Small Intestine, Radiology **20:** 76-78 (Feb.) 1933.
6. Ritvo, Max: Roentgen Diagnosis of Lesions of the Jejunum and Ileum, Am. J. Roentgenol. **23:** 160-169 (Feb.) 1930.
7. Raiford, T. S.: Tumors of the Small Intestine: Their Diagnosis, with Special Reference to the X-Ray Appearance, Radiology **16:** 253-270 (Feb.) 1931.
8. Bloom, A. R.: Lesions of the Small Bowel, Am. J. Cancer **18:** 296-317 (June) 1933.
9. Goldfarb, S. J.: The Roentgen Diagnosis of Lesions of the Small Intestine, New York State J. Med. **34:** 500-505 (June) 1934.

ROENTGEN INDICATIONS IN REGIONAL ILEITIS

Abnormalities may be found either in the colon or in the ileum (table 2).

The changes in the colon are usually the result of spasm secondary to the ileac involvement. The situation in this regard is similar to the Stierlin[10] filling

TABLE 1.—*Chief Clinical Features in "Regional Ileitis"*

Case	1	2	3	4	5	6
Sex	♂	♂	♂	♂	♂	♂
Age	19	42	32	16	33	30
Pain	+	+	+	+	+	+
Constipation	0	0	0	0	0	0
Diarrhea	+	+	+	+	+	+
Fever	+	+	0	+	+	+
Malnutrition	+	+	0	+	0	+
Mass	0	+	0	+	+	0
Hemoglobin	55%	—	—	68%	85%	69%
Gastric acidity:						
Free/total	11/37	19/55	7/37	24/52	25/61	—
Indicanuria	0	+	+	+	Faint	+
Previous appendectomy	+	0	+	0	0	0
Result	Died from perforation found at operation	Well 5 years after resection	Well 3 years after resection	Well 3 years after resection	Well 3½ years after resection	Well 1 year after resection

defect of the cecum in which the lesions are present not in the colon but in the terminal small intestine. The spasm in ileitis takes the form of a contracture, sometimes of the entire cecocolon, but most character-

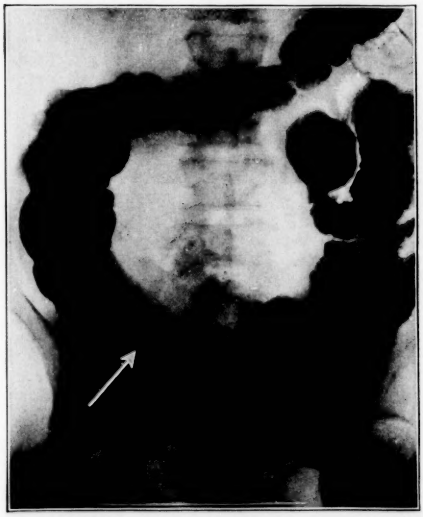


Fig. 3.—Regional (terminal) ileitis. Same case as in figure 2. Film seven and one-half hours after opaque meal. Observe close similarity to figure 2. The deformity of the cecum has disappeared, indicating the absence of organic involvement of this structure.

istically of the cecum proper. There is often a marked spasm of the sphincter of Busi[11] as well as of the cecal tip, so that this segment assumes a special budlike or teatlike appearance. In most cases of functional

10. Stierlin, E., and Chaoul, H.: Klinische Roentgendiagnostik des Verdauungskanals, Berlin, Julius Springer, 1928.
11. This is a sphincter separating the cecal tip from the cecum above it—a cecocolic sphincter in the strict sense (Balli, F.: The Sphincters of the Colon, Radiology **12:** 484-495 [June] 1929).

spasm of the cecum or cecocolon the changes are not constant but intermittent. Furthermore, the opaque enema usually suffices to fill out the involved areas in normal fashion.

On the other hand, the colon may be actually involved by the disease process in the adjacent ileum, as by adhesion or fistula formation. In such instances a fixed

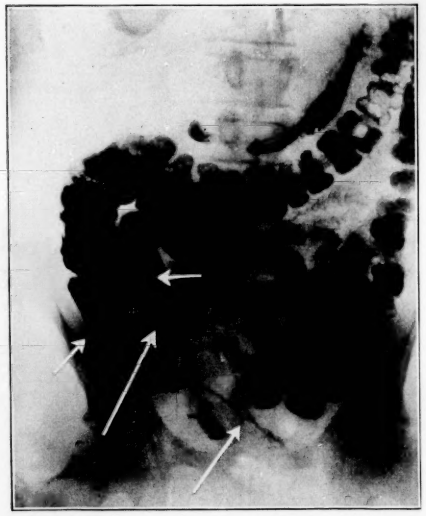


Fig. 4.—Regional (terminal) ileitis, showing multiple "string signs." Although the degree of filling varied from time to time, the position of each involved loop and the general pattern remained unchanged during the week in which the patient was studied.

deformity results, most commonly affecting the inner (mesial) aspect of the large intestine.

In the ileum are found the most important changes. The present series of cases showed the following:

1. Filling defect. There is a constant defect in the filling of the terminal small intestine. This is manifested in all observations and offers a striking contrast to the familiar picture of the final loop of ileum as it rises out of the pelvis to enter the ileocecal valve

TABLE 2.—*Roentgen Changes in "Regional Ileitis"*

Case	1	2	3	4	5	6
Colon						
Cecal spasm	++	+	+	+	+	+
"Colitis"	+	+	+	+	+	+
Ileum						
Filling defect	+	+	+	+	+	+
Irregularity of last filled loop	+	+	0	0	0	+
Stasis	+	0	0	0	0	+
"String sign"	?	+	0	+	+	+

(fig. 1). The extent of this ileac filling defect depends on the extent of the stenotic process in the small intestine.

2. In three of the six cases the ileum proximal to the filling defect seemed abnormal in contour. The involved loops appeared irregular in shape, or else the very last segment of ileum showed a peculiar taper point. In some cases this taper point became continuous with the "string sign" to be described.

3. Actual obstruction was present in two cases. This was manifested by stasis in the ileum nine hours or more after the opaque meal and by dilatation of the loops proximal to the filling defect.

4. Perhaps the most striking finding is the "string sign" (figs. 2, 3 and 4), a name borrowed from A. W. Crane. This is a thin, slightly irregular linear shadow suggesting a cotton string in appearance and extending more or less continuously from the region of the last visualized loop of ileum through the entire extent of the filling defect and ending at the ileocecal valve. It represents the attenuated barium filling of the greatly contracted intestinal lumen. A characteristic "string sign" is apparent in the illustration of the original article by Crohn and his collaborators,[2] as well as in the illustrations of Harris, Bell and Brunn [12] and of Goldfarb.[9] Multiple or branched "string signs" may be attributed to multiple areas of involvement or to fistula formation (fig. 4).

DIFFERENTIAL DIAGNOSIS

Although easy enough to recognize when once seen, it may be possible to confuse the "string sign" with a filled appendix dipping into the pelvis and perhaps with the line of the right sacro-iliac synchondrosis. The

Fig. 5.—Differential diagnosis of regional ileitis. Sarcoma of ileum. Film six hours after opaque meal. Note atypical course of attenuated terminal ileum. The impression given is that of a loop of bowel stretched over an eccentrically located tumor. Such an appearance has not been observed in the cases of regional ileitis seen to date.

appendix shadow is likely to be more homogeneous in density and its outline more uniform than that of the "string sign." The synchondrosis may be identified by careful comparison with the shadow of the opposite (left) side.

The "string sign" may also have to be differentiated from the streak-like filling of abnormally contracted

12. Harris, F. I.; Bell, G. H., and Brunn, H.: Chronic Cicatrizing Enteritis, Surg., Gynec. & Obst. **57**: 637-645 (Nov.) 1933.

(spastic) segments of small intestine. In the case of the latter the lumen is wider, the shadow denser and the outline smoother, and, more important still, the location of these loops may vary from one exposure to another because of the freer mobility of such bowel segments. It is characteristic of regional ileitis that the "string sign" remains hour after hour and even day after day in practically the same relative location in the right lower quadrant.

When it comes to pathologic lesions, it must be noted that regional ileitis is but one of several stenotic lesions that may present a picture similar to, if not identical with, the "string sign." Circumscribed tuberculomas of the terminal ileum have been described with illustrations showing a similar thin streak or streaks of barium by Stierlin and Chaoul [10] and by Schilling and Sametnik.[13] Yet the last named authors present a second case, almost identical with their first, in which, much to their surprise, they failed to find evidence of tuberculosis or new growth and seemed to be dealing with an instance of what might now be called regional ileitis. Stenosing sarcomas of the terminal ileum have been described by Raiford and by Bagnaresi.[14] Talia [15] specifically states that in a case of sarcoma there was a thin strip of barium joining the terminal loop of ileum with the ileocecal valve. A similar instance has come under my observation (fig. 5). Finally, according to Talia, syphilis of the terminal ileum may present exactly the same picture.

In view of these facts one must conclude that, although the "string sign" is not necessarily pathognomonic of regional ileitis, one must always bear this disease in mind when a "string sign" is present.

REPORT OF CASE

In the following case (case 6 of the present series), the diagnosis was made before operation:

A man, aged 30, married, had noticed increased fatigue for ten years. Four years before admission he had a perianal abscess of undetermined type, resulting in a fistula, which was excised. Three years before, onset of three watery stools daily occurred. For two years there had been abdominal distress, and for one year weight loss, fever (maximum 104, average 100-101), anorexia, and blood in the stools. Eight months before he had abdominal cramps for one week, followed by temporary improvement. Four months before there was a recurrence of diarrhea, cramps and fever, and onset of vomiting.

On physical examination, May 12, 1933, the patient was of sthenic habitus, appeared acutely ill, and was pale. He weighed 142 pounds (64.4 Kg.) (ideal weight 172 pounds, 78 Kg.). The lips were dry and cracked and there was slight gingivitis present. The chest was normal. The abdomen was distended and tense; borborygmi were present; there was visible erection of the intestine in the lower midportion of the abdomen. No mass was found. The rectum was normal. The blood pressure was 102 systolic, 80 diastolic; the pulse, 120 and the temperature, 100.2 F. (rectal).

Routine laboratory tests showed hemoglobin, 69 per cent (Sahli, normal 80 per cent). Albumin, hyaline and granular casts were present in the urine; indican was increased. The fasting stomach was empty on aspiration. A test meal was not done.

On roentgen examination, May 13, the stomach and duodenum filled normally.

Three hours after eating, the jejunal and ileac loops were markedly dilated. The cecum was beginning to fill faintly, but the terminal ileum was not visualized.

Four hours after eating, there was one stool. The cecocolon was faintly filled. The jejuno-ileum was still dilated.

Five hours after eating, there was a minute residue still present in the stomach. The colon filled faintly to the distal transverse. The jejuno-ileum was still dilated. A beginning "string sign" was noted.

Six and a half hours after eating, there were two stools. The stomach was empty. The colon was filled to the rectum. The ileum was unchanged. The "string sign" was more marked (fig. 2).

Seven and a half hours after eating, there were three stools. The colon was unchanged and the ileac loops were still dilated; the terminal ileum still showed the filling defect; the "string sign" was still present (fig. 3).

Eight and a half hours after eating, there were four stools, with the same conditions as before except that the "string sign" was not visible.

Twenty-four hours after eating, there were four stools. The cecum was contracted and the colon filled normally from the midascending position to the rectum. The ileum still showed a faint trace of barium.

Forty-eight hours after eating there were seven stools. The colon filled from the hepatic region to the rectum. The ileum was empty.

Seventy-two hours after eating, there were twelve stools. The colon was empty.

Of the opaque enema, 42 ounces was required to fill the colon to the cecum (normal amount 38 ounces). The cecal tip appeared contracted with a budlike protrusion on the mesial surface, three-eighths inch in diameter.

The diagnosis was regional ileitis; the deformity of the cecum was due either to spasm or to involvement in the inflammatory process.

Radical surgical therapy was recommended.

May 29, Dr. A. A. Berg did a resection of the terminal ileum and proximal cecocolon for typical terminal ileitis, with anastomosis of the ileum to the ascending colon.

The pathologic examination was made by Dr. Paul Klemperer. The specimen consisted of a loop of terminal ileum, measuring 23 cm., and 5 cm. of cecum and ascending colon with the appendix. The wall of the ileum was markedly thickened, the serosa was reddened, the fat tissue was penetrated by grayish white fibrous strands. When the specimen was opened, the terminal 8 cm. of ileum showed a marked stenosis. The lumen was narrowed to the thickness of a pencil. The mucosa was thickened and in places consisted of flat polypi. Along the mesenteric insertion there were longitudinal ulcerations, and there the thickening and contraction were most marked. The mucosa showed, in addition, irregularly outlined shallow and deeper ulcerations. It was grayish, and small fragments of a membrane could be pulled off. The underlying submucosa and muscularis were markedly thickened. The latter showed grayish white streaks.

Proximal to the area just described there was a widening of the lumen; the muscular coat was markedly hypertrophic. The mucosa was thickened and showed a few serpiginous shallow ulcerations. Their base was grayish and the edges were red. At a distance of 8 cm. from the proximal termination of the severest involvement there was an almost circular ring, about 1 cm. in width, in which the mucosa was involved in a manner similar to that previously described. Proximal to this circumferential lesion there was a dilatation of the intestine with a few similar scattered ulcerative lesions and then followed again a circular involvement. Still proximal to that, the mucosa was slightly thickened and reddened, but no ulcerations were present.

At a distance of 2 cm. from the ileocecal ring, one of the ulcerations had penetrated all the coats of the intestine up to the serosa. The opening of the fistula was covered by the appendix, which had become adherent with a thickened mesenteriolum. The appendix at this point was also markedly

13. Schilling, C., and Sametnik, S.: Vergleichende pathologisch-anatomische und roentgenologische Studien der Magen-Darmerkrankungen, Fortschr. a. d. Geb. d. Röntgenstrahlen **43**: 395-406 (April) 1931 (p. 403, fig. 20).

14. Bagnaresi, S.: Contributo radiologico e clinico all studio dei tumori dell'ileo, Arch. di radiol. **7**: 745-764 (July-Aug.) 1931.

15. Talia, F.: Sui tumori dell'ansa terminale dell'ileo, Arch. di radiol. **6**: 180-183, 1930.

infiltrated. The mucosa of the appendix was granular and thickened.

Within the mesentery of the ileum there were a number of hyperplastic lymph nodes. The cecum and ascending colon showed only a few mucosal hemorrhages. There were no other changes. The intestinal lesions ended sharply at the ileocecal valve.

The pathologic diagnosis was nonspecific ulcerative granulomatous inflammation of the terminal ileum and appendix, with fistula.

Following the operation the patient made a smooth recovery. May 7, 1934, the general condition was excellent. The weight was 195 pounds (88.5 Kg.). The bowels moved twice a day normally.

SUMMARY

1. In obscure cases of apparent colitis a roentgen study of the small intestine may reveal the presence of a terminal (regional) ileitis.

2. The roentgen study of the small intestine is based on the careful observation of a progress meal from the time the cecum begins to fill to the time the ileum should normally be empty.

3. The chief roentgen signs in regional ileitis affect the colon and the terminal ileum. The changes in the colon, however, are likely to be reflex in nature.

4. The chief changes in the ileum are:

(*a*) Filling defect just proximal to the cecum.

(*b*) Abnormality in contour of the last filled loop of ileum.

(*c*) Dilatation of ileac loops just proximal to the lesion.

(*d*) A "string sign" representing the actual lesion.

5. The "string sign," though characteristic, is not pathognomonic of ileitis. It may be present in other stenosing processes in this region. When present, however, the diagnosis of terminal ileitis must be given consideration.

145 West Eighty-Sixth Street.

ABSTRACT OF DISCUSSION

DR. HARRY M. WEBER, Rochester, Minn.: Dr. Kantor has described the roentgenographic evidence for the narrowing and the distortion of the terminal ileum, two of the most conspicuous and significant anatomic features of the disease now quite generally known as terminal ileitis. He endows the term "string sign," which he revives, with a new significance, as here actual organic disease is responsible for the roentgenologic appearances of which the term is vividly descriptive. A different but hardly less familiar method of visualizing the terminal ileal coils might not inappropriately be recommended here, not to replace but to supplement and serve as a check on the information elicited by the method just described. It is the primary roentgenologic method of studying these segments at the Mayo Clinic, where they are examined as an integral part of investigation of the colon, in much the same sense as examination of the duodenum is a part of examination of the stomach. Under roentgenoscopic control the terminal ileum is filled to a desired extent with opaque suspension by reflux through the ileocecal orifice. The patient is then permitted to relieve the colon of the bulk of contrast fluid it contains by defecation. The ileum normally remains more or less completely filled with contrast fluid and rests at a level higher in the abdominal cavity than at the four and six hour periods after ingestion of the opaque meal, making it more accessible for screen-controlled manipulation. More important still from the standpoint of eliciting roentgenologic evidence of relatively early pathologic change expressed on the mucosal surface, there is a minimal mixture of contrast substance with nonopaque intestinal content, since the latter has been reduced to a minimum with the preparation of the large intestine for its examination. It is felt that in this way the terminal ileum is made almost as readily accessible for roentgenologic examination as are the stomach and large intestine, and the diagnostic results are expected to be as accurate and reliable; hence it does not seem unreasonable to demand a diagnosis of terminal ileitis from the roentgenologic examination before that stage in its development when these extensive changes have already taken place. Nor is it unreasonable to suspect that at earlier stages the disease might be amenable to less radical surgical therapeutic measures than have been found necessary up to the present time. It is entirely possible, indeed, that in early stages the disease might be arrested, even eliminated, by nonsurgical management.

DR. JAMES T. CASE, Chicago: The technic of examination of the small intestine in its terminal portion is interesting. It matters little whether one decides on using the opaque enema method or the barium meal followed through. Some will become more expert in one and others in the other. I myself prefer to use a combination of the two methods. I like to give a progress meal and follow it through. I advocate the use of frequent observations of the small bowel. In order to do that, the meal should begin early in the day. The practice of beginning meals at 1 o'clock or later in the day does not permit sufficiently frequent observations of the bowel between the fifth and ninth hours, unless one behaves unusually in habits of working hours. Barium can be taken at the ordinary breakfast in the morning, and the patient can be seen for the first time around 11 o'clock, and from then on the study should be done fluoroscopically with the patient prone on the fluoroscopic table, and with manipulation under the fluoroscopic screen. Films can be exposed under the screen at the time of fluoroscopy, which will be more illuminating than having the films made in the reverse position. It is true that one can use the opaque enema for studying the terminal ileum. I too make it a habit to give the enema until the lower coils of the ileum are visualized. That is routine, and the filling of the sigmoid by the opaque material often lifts the small intestine out of the true pelvis into a place where it can be manipulated. Manipulation under the fluoroscopic screen is an important adjunct to the roentgen study of the digestive tract. Another method is to inflate the bowel with air after the introduction of thorium dioxide or barium sulphate sufficiently to reach the terminal ileum, a minimum amount of opaque material being used; but inflating the bowel with air is rather distressing and I do not use it very often. I should like to call attention to the herringbone appearance of the small intestine above the dilated loops. Sometimes this is the first indication of an organic lesion in the terminal ileum. As a source of possible error, I would mention that there may be found an empty loop of terminal ileum where it lies over the iliopectineal line, especially if the patient is observed prone. I should like to commend Dr. Kantor's remarks. I appreciate what he said about some doctors being "addicted" to the examination of the colon by enema alone; there are many lesions of the colon, some of them organic, which can be determined only by watching the progress of opaque material.

DR. ANTHONY BASSLER, New York: I want to express appreciation to Dr. Crohn for bringing this subject forward again, and to Dr. Kantor, and I suggest that his demonstration in the Scientific Exhibit be seen. I feel that the atonies, the spasms, the hyperplasias and the granulomas in the intestinal canal need a great deal more study than they have had so far. I don't think that they are going to be entirely understood until biologic investigation of the intestinal canal becomes a routine procedure. Perhaps some may remember that I was the first to suggest the use of the x-rays in granulomatous processes. I treated not a few of them and have seen most favorable results from the rather simple method of the therapeutic use of the x-rays with the proper type of machine. The lesion of ileitis is really a local irritation, a low grade inflammation of the mucosa. It begins in the mucosa and in all probability is due to certain of the anaerobic organisms that can be found in the intestinal canal, of which there are about eight genus types, and my observations have suggested that they are capable of producing the condition. The pathology is one of proliferation of the hematopoietic cells and mainly proliferation and irritation of the somatic cells of the intestinal wall. The granulomatous processes of syphilis and tuberculosis,

the two outstanding granulomatous processes, are due to infections. The others that occur in the intestines and rectum I feel are also due to infection, also anaerobic bacterial in type. Making allowance for the difference in the anatomy and physiology of the intestinal mucosa and the skin, in which low grade infections are common, that probably is the reason why the therapeutic doses of x-rays have been helpful in the granulomatous processes. Since the infection is a closed one, as compared with similar infections of the skin, surgical therapy may become necessary.

DR. B. B. CROHN, New York: When I first published a paper on ileitis in 1932 I had fourteen cases; to date I have had forty-two cases. I have added twenty-eight cases in two years, and that will give an idea that ileitis is not an unusual finding and that its distribution is wide, as evidenced by the fact that cases are coming from all parts of the United States. I had a letter from Amsterdam, Netherlands, stating that cases were being found over there, too. The disease is one of youth; the incidence ranges from 4½ years of age (the youngest) to 30 or 40. A case is rarely seen above the age of 30. I am grateful to Dr. Kantor for naming this manifestation in the ileum the "string sign." It is a fitting term. The string sign is absolutely characteristic. I hesitate to say it is pathognomonic, though I think it is, because in the differential diagnosis of other conditions that may create the same sign I can think of sarcoma of the small intestine, nearly always multiple, and of Hodgkin's disease, affecting the mucosa by secondary involvement, which does not give a picture similar to the string sign. Cases run for years with some diarrhea, slight elevation of temperature and slow loss of weight. Many of them are lost as cases of psychoneurosis, because the nervous manifestations are common and the diarrhea insignificant. One finally discovers this radiographic sign and the diagnosis becomes obvious. In the original conception the disease was considered to be limited to the terminal ileum, but soon, thanks to Dr. Bargen's suggestion, the possibility of involvement of the upper ileum was suspected and soon cases were found in which the terminal and the upper ileum were involved. In an involvement of the upper ileum itself it is almost invariable that the terminal ileum also is involved, and any surgical resection that fails to remove the terminal ileum is very likely to meet with failure. In twenty-five cases picked to show the segmental distribution of the disease, the terminal ileum was almost always involved. The disease transcended the ileocecal valve in only one case. It had passed over into the cecum. After Harris's publication (from San Francisco), I was on the lookout for cases of high intestinal involvement, and soon ran into cases involving more extensive segments of the ileum, and to cases involving the whole ileum and even the jejunum. I have observed four atypical cases. These cases were seen at exploratory laparotomy. The terminal ileum was seen as absolutely rigid as a hose pipe, but there was massive involvement of segments of the transverse colon and descending colon, and also in certain instances of the ascending colon. The patients were too sick for resection, with temperatures of 103 and 104 F. These cases have gone on to spontaneous recovery. I cannot classify them as ileitis. The patients had no diarrhea but only two or three movements a day. It may be necessary to revise or add to the present notion of ileitis and colitis by recognizing a combined disease in which the terminal ileum and segments of the colon are involved.

DR. JOHN L. KANTOR, New York: I am grateful to Dr. Weber for the term "twisted cord" appearance as an alternative to the "string sign" nomenclature for the characteristic x-ray appearance. I wholly agree that, by using the colon enema in such a way as to fill the terminal ileum deliberately, much valuable information can be gained. To Dr. Case all owe a debt of gratitude for his pioneer work in the radiology of the colon. He made a good suggestion, namely, to start the examination early in the day so as to give enough time for study of the small intestine. Dr. Bassler quite properly pointed out that these are the end results of the lesions of the disease and that operations, for example, may not be the whole story in the way of therapy. Dr. Crohn deserves credit, as always, for calling attention to this disease, and it is gratifying to know that he has accepted these roentgen observations.

THE EFFECT OF VITAMIN A ON THE COMMON COLD

GERALD S. SHIBLEY, M.D.
AND
TOM D. SPIES, M.D.
CLEVELAND

Vitamin A is often called the anti-infective vitamin, and this anti-infective value is believed to be especially operative in the prevention of bacterial invasion of mucous membranes.[1] Because of this alleged protective value, substances containing this vitamin are being advocated extensively, without adequate experimental proof, for prophylaxis against the common cold. The common cold and its complications are of such great importance that it seemed desirable to determine whether or not the addition of vitamin A to the diet has any effect on the prevention, duration and severity of the disease. In the present communication we are reporting the results of such a study. Recently, somewhat less detailed and shorter studies have been reported in infants by Wright[2] and by Hess and his co-workers.[3] Our own investigation has been limited to observations made on young adults.

From a practical standpoint, it seemed far more important to compare individuals on average diets supplemented by vitamin A with those on such diets alone than to attempt the almost impossible and far less useful comparison between individuals receiving adequate amounts of the vitamin and those on an imposed deficiency diet. Although the average American dietary contains an appreciable amount of vitamin A, it is quite possible that at times there may be a deficiency of small though definite subclinical proportions.[4] Our aim has been to determine whether the addition of substantial amounts of vitamin A to average, perhaps somewhat deficient, diets would significantly influence the incidence, severity and duration of colds.

METHODS

Material.—At the beginning of the study the experimental group consisted of 241 adult volunteers. Of these, 143 were first and second year students in the Western Reserve University School of Medicine; sixty were first and second year students in the School of Nursing, fifteen were head nurses in the Lakeside Hospital, and twenty-three were members of the profes-

Read before the Section on Pharmacology and Therapeutics at the Eighty-Fifth Annual Session of the American Medical Association, Cleveland, June 14, 1934.

From the H. K. Cushing Laboratory of Experimental Medicine, Department of Medicine, Western Reserve University, and the Medical Service, Lakeside Hospital.

1. Osborne, T. B., and Mendel, L. B.: J. Biol. Chem. **15**: 311, 1913; Ophthalmia and Diet, J. A. M. A. **76**: 905 (April 2) 1921. Bloch, C. E.: J. Hyg. **19**: 283 (Jan.) 1921. Steenbock, Harry; Nelson, E. M., and Hart, E. B.: Am. J. Physiol. **58**: 14 (Nov.) 1921. Mori, S.: Bull. Johns Hopkins Hosp. **33**: 357 (Oct.) 1922. Goldblatt, Harry, and Benischek, Maria: J. Exper. Med. **46**: 699 (Nov.) 1927. Green, H. N., and Mellanby, Edward: Brit. M. J. **2**: 691 (Oct. 20) 1928. Mellanby, Edward, and Green, H. N., ibid. **1**: 984, 1929. Panaceas for the Common Cold, editorial, J. A. M. A. **97**: 1802 (Dec. 12) 1931. Green, H. N.; Pindar, D.; Davis, G., and Mellanby, Edward: Brit. M. J. **2**: 595 (Oct. 3) 1931. Ellison, J. B., ibid. **2**: 708 (Oct. 15) 1932. Fox, F. W.: South African M. J. **6**: 8 (Jan. 9) 1932. Green, H. N.: Lancet **2**: 723 (Oct. 1) 1932. Harris, L. J.; Innes, J. R. M., and Griffith, A. S., ibid. **2**: 614 (Sept. 17) 1932. Moore, T., ibid. **2**: 669 (Sept. 24) 1932. Wolff, L. K., ibid. **2**: 617 (Sept. 17) 1932. Fox, F. W.: East African M. J. **10**: 190 (Oct.) 1933.

2. Wright, H. P.; Frosst, J. B.; Puchal, F., and Lawrence, Margaret R.: Canad. M. A. J. **25**: 412 (Oct.) 1931.

3. Barenberg, L. H., and Lewis, J. M.: Relationship of Vitamin A to Respiratory Infections in Infants, J. A. M. A. **98**: 199 (Jan. 16) 1932. Hess, A. F.; Lewis, J. M., and Barenberg, L. H.: Does Our Dietary Require Vitamin A Supplement? ibid. **101**: 637 (Aug. 26) 1933.

4. Blackfan, Kenneth, and Wolbach, S. B.; J. Pediat. **3**: 679 (Nov.) 1933. Fox[1]; Jeans, P. C., and Zentmire, Zelma: A Clinical Method for Determining Moderate Degrees of Vitamin A Deficiency, J. A. M. A. **102**: 892 (March 24) 1934.

sional and technical staff of the hospital. About one third were women. The mean age was 24 years. At the end of the experiment the total number had fallen to 211.

Duration of Experiment.—Vitamin administration was begun in the latter part of January 1933 and was discontinued the first week of March 1934. The period of observation of colds began Feb. 4, 1933, and ended March 3, 1934, a total of fifty-six weeks.

Administration of Vitamins.—Vitamin A was given in the form of halibut liver oil.[5] In view of the well

WEEKLY REPORT ON RESPIRATORY INFECTIONS

FOR WEEK ENDING ____ No. ____

	Check	Remarks
NO SYMPTOMS		
SYMPTOMS		
1. Nasal discharge		
2. Nasal obstruction		
3. Cough		
4. Sputum		
5. Sore throat		
6. Fever, thermometer		
7. Aching		
8. In bed		

DATES: Onset illness: Termination:

Material taken: Yes..... No.....

NAME:

Fig. 1.—Card sent out weekly for collection of data regarding respiratory infections.

recognized fact that vitamin A is stored for some time in the tissues of animals and man, the material was given for greater convenience weekly rather than daily. Each weekly dose contained 200,000 international units (I. U.) of vitamin A and definitely exceeded the usual amount taken in a week when the vitamin is prescribed on the customary daily basis. In addition, each dose of halibut liver oil contained 4,000 international units of vitamin D.

Although the fact of storage is generally accepted, it was considered necessary to demonstrate experimentally in animals that vitamin A in sufficient amounts could be given at weekly intervals and still protect against manifestations of deficiency. For this purpose twenty-five white albino rats between the ages of 3 and 4 weeks, weighing from 40 to 50 Gm., were selected. The dosage of vitamins given to these rats was proportionate by body weight to the amount administered to the volunteers.

The rats were divided equally into five groups and all were fed Sherman's basal vitamin A-free diet [6] ad libitum throughout the period of observation. A weigh-back on their diets was made daily. Animals in group 1 received no vitamin A, but each was given 0.5 international unit of vitamin D daily. Each animal in group 2 received a daily supplement of 15 international units of vitamin A and 0.5 international unit of vitamin D. Each rat in group 3 received a single weekly dose of 105 international units of vitamin A and 3.5 international units of vitamin D. In group 4 each animal received at two week intervals a dose of 210 units of vitamin A and 7 units of vitamin D. In group 5 each rat was given a single dose, at intervals of three weeks, of 315 units of vitamin A and 10.5 units of vitamin D. The vitamin supplement was dropped directly into the mouth of each animal in such a fashion as to insure his receiving the entire amount. All animals were weighed every other day and they were examined at frequent intervals for any manifestations of disease.

By the end of the sixth week the rats in group 1 (those receiving no vitamin A) failed to maintain their initial gain in weight and began to eat less than previously. Two weeks later they had definite manifestations of vitamin A deficiency characterized by a generally unkempt appearance, circumorbital swelling, and infection of the eyes; by this time they had lost 30 per cent of their body weight and were eating only one half of the maximum basal diet they had taken previously. All animals in the other four groups continued to grow and to gain weight normally and at the end of the eighth week, when the experiment was terminated, showed no evidence of disease.

Selection of Groups.—The volunteers were divided into groups A, B and C. Both random sampling, to avoid the error arising from an unequal distribution of so-called cold susceptibles, and probable continued equality of groups were sought for by placing individuals in the three groups as follows: On the basis of scholastic standing and beginning with the highest student in a given class, individuals were assigned in turn to each group; i. e., first man in his class to group A, second man to B, third to C, fourth to A again and so on. The remaining thirty-eight were selected at random by alphabetical draw. The groups at the beginning contained: A, seventy-six;[7] B, eighty-three; C, eighty-two. At the end of the experiment they numbered respectively sixty-seven, seventy-one and seventy-three. Group A received halibut liver oil. The other two were controls: one, group B, was given the viosterol equivalent of the halibut liver oil administered to group A, and the other, group C, received plain maize oil. Special efforts were made to have individuals taking part in the experiment ignorant of their group in order to prevent a prejudiced point of view. To aid

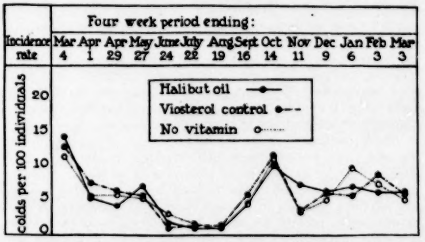


Fig. 2.—Incidence rate of colds in test and control groups. The figure shows the weekly percentage incidence averaged for successive four week periods.

in this, the material was well disguised in a small amount of tomato juice (which contains only a little vitamin A).

Collection of Data.—At the beginning of the experiment a careful presentation of the problem and a detailed discussion of the character of colds and their symptoms was entered into with the entire group. Although all taking part had a medical point of view, each factor in detail was clearly defined. Such conferences were renewed from time to time throughout the experiment. For actual collection of data regarding

5. This experiment was made possible through the courtesy of Dr. C. E. Bills of Mead Johnson & Co., who placed large quantities of halibut liver oil and viosterol at our disposal.

6. Sherman, H. C., and Smith, S. L.: The Vitamins, New York, Chemical Catalog Company, 1931, p. 258.

7. The test group was made slightly smaller to reduce cost.

respiratory infections, cards (fig. 1) were sent out each Monday for the week immediately preceding. Whenever symptoms were reported, the individual was seen personally and all details were carefully checked.

Definition of Common Cold.—For this study we have included mild to moderately severe infections of the upper respiratory tract of the typical type usually called "common cold," characterized by definite coryza, rhinitis and nasopharyngitis. We have not included simple follicular pharyngitis, follicular tonsillitis, influenza (so classified on the basis of severe constitutional reaction with prostration and minimal involvement of the upper respiratory tract), hay fever, and short respiratory attacks of a duration of twenty-four hours or less.

RESULTS

Effect of Vitamin A Supplement on Incidence of Colds.—In analyzing the incidence of colds in the vitamin A group and in the controls, the problem has been approached from two angles. First, a comparison has been made of the weekly incidence rates in the groups as a whole, all participants in the experiment being used, and, second, comparisons have been made of the individual attack rate in those subjects only who completed the whole fifty-six weeks period of study. As noted, the three groups did not remain at full strength. The drops in groups A, B and C were respectively seventy-six to sixty-seven, eighty-three to seventy-one, and eighty-two to seventy-three, or a total drop from 241 to 211. This loss was fairly evenly scattered throughout the experimental period.

The attack rate was calculated on the basis of the number of colds per hundred individuals weekly. The results are shown graphically in figure 2, in which the incidence rate is charted as the weekly percentage incidence averaged for successive periods of four weeks. The total number of colds entering into this analysis is 753. Examination of this figure shows that the three curves are essentially identical. In other words, no evidence is forthcoming from these data that supplemental vitamin A has any influence on the incidence rate of colds. The curve is of interest in that it shows the sharp epidemic peaks noted by Townsend [8] and other observers in the early fall and winter months.

In order to compare the average individual incidence of colds in the vitamin A group with that in the control groups, it was necessary to include only individuals who participated in the experiment throughout the entire period of fifty-six weeks and whose final colds were complete when we terminated the study. The results of the analysis showed the average number of colds per individual to be: group A, 3.42 ± 0.14; group B, 3.56 ± 0.13, and group C, 3.06 ± 0.15. When all who completed the experiment are included, with an increase in the number of individuals respectively in the three groups of nine, eight and five, the average individual incidence is: group A, 3.41; group B, 3.53, and group C, 3.25. This is further clean-cut evidence that supplementary vitamin A in excess of that contained in the usual dietary has no influence on the incidence of colds. These results are in entire harmony with the observations of Hess and his co-workers [3] and of Wright.[2]

Influence of Vitamin A Supplement on Severity of Colds.—In a disorder as mild as the common cold, determination of relative severity is a difficult task. In attempting this, previous observers have used some or all of the following standards: fever, malaise, absence from school or work, going to bed, complications and duration. The following three criteria have been selected arbitrarily for this study: (1) aching or malaise, (2) fever at onset as recorded by a thermometer, (3) going to bed. The factor of duration will be considered separately and in general is not necessarily related to severity of infection. When a cold was reported with one only of the three criteria noted, it was designated +, the presence of any two of these led to the designation ++, and when all three were present the cold was called +++.

Of the total of 753 colds reported, 158, or 21 per cent, were classified as + to +++. The distribution of these relatively severe colds in the groups is shown in table 1. It will be noted that their incidence is essentially identical in the three groups. This is true not only of severe colds as a whole but also of the three individual categories. Although the number of these relatively severe colds is comparatively small, their strikingly similar incidence in the three groups points strongly to the probability that supplementary feeding of vitamin A leads to no significant reduction of colds of relatively severe types.

TABLE 1.—*Distribution of Relatively Severe Colds* *

Severity of Cold	Number of Colds		
	Group A Halibut Liver Oil	Group B Viosterol Control	Group C No Vitamin
+	29	26	27
++	18	15	17
+++	8	10	8
Totals	55	51	52

* Severity determined on basis of presence of (a) aching or malaise; (b) fever, with thermometer, (c) going to bed; + indicates any one of foregoing, ++ any two, and +++ all.

Effect of Vitamin A Supplement on Duration of Colds.—Precise information regarding the duration of colds is notoriously difficult to secure. Some individuals consider that their colds have terminated as soon as their relatively acute symptoms are over, others have a substrate of mild chronic nasopharyngitis, and still others have a definite background of chronic sinusitis. It took us several weeks at the beginning of the study to realize our difficulties and to educate our experimental subjects in the matter of accurate reporting of termination.

Our criteria for determination of duration were: In the case of subjects who have had a background of chronic nasopharyngitis or sinusitis, a new acute infection was considered terminated at the point when, in the opinion of the subject, it had receded to the approximate level of the usual chronic symptoms. Each decision in this group generally required repeated careful consultation with the individual concerned. The numbers of these subjects in each group were respectively nine, nine and ten. One point that was most difficult to settle in such individuals was the differentiation between mild exacerbations of a chronic condition and true new infections. For all others in the experiment, a cold was considered as ended when all symptoms had completely disappeared. Such symptoms often arose from secondary manifestations as purulent nasopharyngitis or sinusitis, laryngitis, tracheitis or bronchitis. The mean duration of colds in the control groups with the exception to be noted below was 12.5 days. This

8. Townsend, J. G.: Pub. Health. Rep. **39**: 2669 (Oct. 24) 1924.

is 2.5 days shorter than the duration of colds in students as reported by Doull.[9] It is possible that this difference may be accounted for on the basis of our exclusion of symptoms of a definitely chronic nature from the duration of acute colds.

As noted, supplementary feeding with vitamin A has had no influence on the incidence or severity of colds. The results are unequivocal. In the matter of duration, the experimental data have been somewhat more difficult of interpretation. When the results were first analyzed, it became apparent at once that the colds in

TABLE 2.—*Distribution of Colds of Varying Lengths**

	Group A		Group B		Group C	
Length of Cold	No. of Colds	Per-centage	No. of Colds	Per-centage	No. of Colds	Per-centage
10 days or less	151	65.0	159	60.8	129	54.0
11 to 20 days	66	28.4	72	27.6	75	31.4
21 to 30 days	13	5.6	20	7.6	21	8.8
30 days or longer	2	1.0	10	4.0	14	5.8
Totals	232	100.0	261	100.0	239	100.0

* Number and percentage incidence are shown.

the vitamin A group were consistently shorter than those in the two control groups. When all completed colds (732) were included, the mean average duration was found to be: group A, 9.59 ± 0.12; group B, 11.07 ± 0.22, and group C, 12.51 ± 0.23.

These preliminary figures were taken to Dr. G. E. Harmon of the Department of Hygiene and Bacteriology for examination and he reported that they were significant statistically, provided duration had been determined on the same criteria and with equal accuracy in all groups. With his assistance we proceeded to analyze the data in detail from several angles as

TABLE 3.—*Relationship of Duration of Colds to Number of Attacks per Individual*

	Group A			Group B			Group C		
Individuals Having	No. Indi-vid-uals	Total Colds	Aver-age Dura-tion	No. Indi-vid-uals	Total Colds	Aver-age Dura-tion	No. Indi-vid-uals	Total Colds	Aver-age Dura-tion
No colds	1	0	0	1	1	0	2	0	0
1 cold	6	6	5.33	7	7	9.29	13	13	11.00
2 colds	12	24	9.17	8	16	15.00	14	28	10.75
3 colds	10	30	7.20	12	36	8.89	14	42	10.40
4 colds	15	60	11.00	17	68	11.96	12	48	13.23
5 colds	6	30	7.80	13	65	10.14	6	30	14.73
6 colds	7	42	10.48	3	18	11.33	4	24	10.83
7 and 8 colds	1	7	9.14	2	14	9.79	3	23	13.85
Totals and av.	58	199	9.38 ± 0.30	63	224	10.88 ± 0.36	68	208	12.14 ± 0.43

described in an effort to discover whether this apparent difference in duration was consistent throughout or whether it was associated with some particular extenuating factor.

When the percentage incidence of colds of varying lengths in the three groups was studied (table 2), it was found that colds of intermediate length (from eleven to twenty days) occurred with about equal frequency in all groups and that the number of short colds (ten days or less) was greatest, and of long colds (twenty days or longer) least, in group A. This was more or less expected and merely supports the finding that colds in group A were of somewhat shorter average duration than in groups B and C. That this is equally true in subjects having one cold or several during the period of observation is brought out in table 3, which is based on 631 colds occurring in 189 individuals. Here it will be noted that, irrespective of the number of attacks suffered by the individual, the average duration of the colds was always shorter in the group taking vitamin A.

When the factor of season was investigated, interesting and possibly pertinent information was obtained. For this analysis, colds were classified arbitrarily as winter colds when beginning in the periods (*a*) Feb. 4 to April 29, 1933, and (*b*) Nov. 12, 1933 to March 3, 1934; spring and summer colds, those arising in the period April 30 to August 19, and fall colds, those included in the period August 20 to November 11. The time periods designated were selected on the basis of the fairly well demarcated incidence peaks as shown in figure 2. Only the colds of those who completed the experiment and whose colds had ended have been included. Table 4 shows the results.

TABLE 4.—*Relationship of Duration of Colds to Time of Year When They Occurred*

	Group A 58 Individuals			Group B 63 Individuals			Group C 68 Individuals		
Period of Year	Number of Colds	Average Duration	Number of Colds per Person	Number of Colds	Average Duration	Number of Colds per Person	Number of Colds	Average Duration	Number of Colds per Person
1st winter period Feb. 4-Apr. 29	59	7.36 ±0.43	1.02	75	9.28 ±0.47	1.19	62	12.45 ±0.82	0.92
Spring and summer colds Apr. 30-Aug. 19	26	10.04 ±0.70	0.45	25	10.80 ±0.95	0.40	28	11.50 ±1.24	0.41
Fall colds Aug. 20-Nov. 11	54	11.04 ±0.77	0.93	58	11.21 ±0.77	0.92	49	11.88 ±0.74	0.72
2d winter perior Nov. 12-Mar. 3	60	9.58 ±0.46	1.03	66	12.45 ±0.73	1.05	69	12.30 ±0.80	1.01
Totals and averages	199	9.38 ±0.30	3.43 ±0.14	224	10.88 ±0.36	3.56 ±0.13	208	12.14 ±0.43	3.06 ±0.15

If the first group of winter colds is left out of consideration for the moment, certain definite facts appear: (*a*) Spring and summer colds and fall colds are of approximately the same duration in all groups. (*b*) Winter colds in the group receiving vitamin A are shorter by nearly three days than those in the two control groups. If it were not for the fact that the observations for the first winter period, particularly with respect to the viosterol control group, are not quite consistent with those in the second winter period, these data would lead logically to the conclusion that vitamin A, as given, shortens the duration of colds in winter but has little effect on summer colds. It is true that the colds in the group receiving vitamin A were distinctly shorter in the first winter period, but colds in the viosterol control group, though longer than these, are definitely shorter than those in the group receiving no vitamin. To be consistent, colds in the last two groups should have been of equal length, as they have been through all other periods. As suggested, during the first winter period our data on duration may have been somewhat less exact than later when we had thoroughly educated our subjects in the matter of accurate

9. Doull, J. A.; Herman, N. B., and Gafafer, W. M.: Am. J. Hyg. **17**: 536 (May) 1933.

reporting of termination. This may be an explanation of the discrepancy but should be accepted with caution, as errors in reporting should have been equalized by random selection. Nevertheless, in spite of this inconsistency the evidence that vitamin A shortens colds moderately in the winter months must be considered suggestive.

Infections Other than Colds.—In the period of observation, ninety-five infections of the upper respiratory tract other than colds occurred in the group. These included acute attacks of tonsillitis, pharyngitis, laryngitis, bronchitis and influenza, of which we had only two cases in the period of observation. They were not studied in detail. They are of interest mainly in the fact that their distribution in the three groups was approximately equal, being respectively thirty-four, thirty-two and twenty-nine, thus indicating that supplemental vitamin A has no influence on their incidence. These results are in harmony with the observations reported for children by Hess and his co-workers.[3]

SUMMARY AND COMMENT

With a view to ascertaining whether supplementary feeding with vitamin A would influence the incidence, severity or duration of colds, a group of young adult volunteers, numbering 241 at the beginning of the experiment and 211 at the end and divided into test and control groups by random selection, has been kept under observation for a period of fifty-six weeks beginning February 1933. Vitamin A in the form of halibut liver oil was administered in excess in large weekly doses to the test group. That this more convenient method of giving the vitamin weekly is as effective as when given daily was demonstrated experimentally by the successful protection of rats against characteristic vitamin A deficiency when the material was administered in adequate amounts at intervals of one, two and three weeks.

The results in regard to incidence indicate clearly that supplemental feeding of vitamin A in no way reduces the number of colds. The weekly attack rate as charted in figure 2 shows an incidence curve that is essentially the same in the vitamin A group as in the controls. The average incidence rate per person for the total period of fifty-six weeks was practically identical in the three groups, being 3.41 colds per person for the vitamin A group, 3.56 for the viosterol control group and 3.25 for the group receiving no vitamin at all. Respiratory infections other than colds also appeared with the same frequency in the three groups. Vitamin A failed to influence significantly the relative severity of colds. Although severity in colds is not a conspicuous finding, when judged by the standards adopted, 158, or 21 per cent, of the total colds observed fell into this class. Of these, almost exactly equal numbers fell into the test and control groups.

With respect to duration, the experimental data have been less easy of interpretation. Colds occurring in spring, summer and fall showed very little difference in length in the three groups. In winter infections, however, there was definite shortening, by two or three days, of the average duration of colds occurring in the group taking vitamin A. Certain inconsistencies in our results, as noted, have made us feel the necessity for caution in drawing positive conclusions. The evidence, however, is at least suggestive that vitamin A has a slight shortening effect on colds occurring in the winter. Whether this difference in winter as compared with spring, summer and fall bears any relationship to the reduction of leafy vegetables in the diet in the winter months with consequent decrease of provitamin and whether, if confirmed, it represents a seasonal deficiency analogous to that associated with avitaminoses in general is a matter for speculation.

SUMMARY AND CONCLUSIONS

1. The effect of vitamin A on the incidence, severity, and duration of the common cold has been studied.

2. It has been shown that vitamin A in the form of halibut liver oil may be administered effectively in large single weekly doses.

3. Vitamin A has no effect on the incidence or severity of colds.

4. Suggestive but not conclusive evidence indicates that vitamin A shortens colds slightly in the winter months.

ABSTRACT OF DISCUSSION

DR. K. K. CHEN, Indianapolis: In presenting their almost negative results with vitamin A for the treatment of the common cold, Drs. Shibley and Spies have rendered a great service to the medical profession. For some years vitamin A was supposed to prevent infection, but evidence is accumulating to show that the claim is not justified. It was shown that vitamin A is useless in the treatment of pneumonia or tuberculosis, in the prophylaxis against respiratory infections among infants and school children, and in the reduction of incidence of otitis media in scarlet fever. Drs. Shibley and Spies have now concluded that vitamin A has no bearing on the number or severity of common colds. Whether or not it shortens the duration of colds in the winter months is a question requiring additional proof.

DR. TOM D. SPIES, Cleveland: Dr. Shibley and I found out that one can protect rats, even in their most susceptible period of life, against vitamin A deficiency by giving a large amount of the vitamin at varying weekly intervals. That may or may not be of clinical importance. We make no claim. We don't even advise pediatricians to try it. I do happen to know that some babies do not like cod liver oil, do not like other preparations, and therefore do not take ample quantities. At the present time there are new methods. The potencies have been so increased that one could struggle perhaps with a weekly or biweekly dose a little easier than with a daily dose. However, neither do we make this as a recommendation.

DR. WILLIAM J. KERR, San Francisco: The authors suggest that vitamin A has little value in protecting the nose from colds. The autumnal rise in the incidence of colds was not prevented by the use of vitamin A, which is abundantly available during the summer and fall months in the dietary. At the University of California we have not been able to transmit the common cold to susceptible persons, even though they are known to have many colds during the year, so long as we keep the environment constant and at a comfortable level. It has seemed to me that probably the defect or fault is a constitutional one and is connected with the autonomic nervous system. These individuals were unable to respond normally to the environment and fail to respond when the cooling power of the air is suddenly increased.

DR. RUSSELL L. HADEN, Cleveland: Dr. Shibley is very much interested in the reproduction of the common cold in the chimpanzee. I wonder whether he has tried the effect of vitamin A on the experimental production of the common cold in the chimpanzee.

DR. GERALD S. SHIBLEY, Cleveland: I must answer Dr. Haden's question in the negative. The main reason is that chimpanzees cost from $350 to $700 and that therefore one would have too few animals for results of statistical significance. We have, as a matter of fact, kept our animals up on all vitamins but they still catch colds just as human beings do. I am rather interested in Dr. Kerr's remark about the noninfectiousness of colds. I was associated for a number of

years with Dr. Dochez in attempts at the experimental transmission of colds. We were successful in a large proportion of cases, tried not only with chimpanzees but also with human beings. It is true that we did not have the air conditioning but we had thermostatic control. There is one question which I should like to ask which is rather interesting in the light of Dr. Kerr's statement that one has no chilling, under the conditions of his experiments, and therefore gets no colds. It is a fairly well known fact that explorers who have gone to the north pole for as long as two or three years, in spite of exposures to cold, to fatigue, and to practically every type of elemental exposure, never get colds. The minute they hit civilization, where colds are present, back come colds again.

A NEW BIOLOGIC TEST FOR HORMONES IN PREGNANCY URINE

PRELIMINARY REPORT

A. E. KANTER, M.D.
C. P. BAUER, M.D.
AND
A. H. KLAWANS, M.D.
CHICAGO

It has been known that male fish of certain species undergo color changes during the breeding season and develop what is known as the "wedding dress." These chromatophore reactions have been developed artificially by stimulation with various hormone preparations.[1] Following the same principle it was thought that analogous reactions might be obtained on female fish of species that have an externally visible oviduct. Tozawa [2] found that males of the Japanese bitterling (Acherlognathus intermedium) developed a chromatophore reaction to hormones injected only during the breeding season, April 15 to July 1. In 1932 Fleischmann and Kann [3] reported that female bitterlings show an enlargement of the ovipositor following injection of an estrogenic preparation (Progynon) in doses of from 40 to 120 mouse units, while physiologic solution of sodium chloride and an anterior pituitary extract yielded no reaction. These authors claim a lengthening of the oviduct with estrogenic substance during the quiescent period. In 1933 Szusz [4] tested female bitterlings with boiled and unboiled urine from pregnant women, male urine, estrogenic substance (Progynon and Hogival), and anterior pituitary extract (Glanduantin), 10 cc. of each to 1 liter of water in which the fish are placed. During the breeding season forty-eight fish were tested and all showed lengthening of the ovipositor in from thirty-six to seventy-two hours with both the boiled and the unboiled urine. Six fishes tested with anterior pituitary extract showed no changes. Urine from twenty nonpregnant females gave twelve positive and eight negative reactions. Male urine caused some lengthening in seven of the thirty-seven tested, greater lengthening in twenty-two instances, and no reaction in eight. This author tested twenty-two fish from July 1 to August 15 and all gave negative reactions. Szusz does not know what is responsible for the reaction. He concluded that full lengthening of the ovipositor takes place in seventy-two hours, that the test can be positive only during the breeding season, that male urine may cause a positive reaction, and that a negative reaction during the breeding season is absolutely indicative of the absence of pregnancy.

The senior author felt that the possibilities of the female bitterling test deserved further investigation. After sporadic attempts at testing on the various problems associated with this research, the results became so confusing that it was felt tests could not be conducted along scientific lines until the fish had been standardized; i. e., it was necessary to know in advance whether each fish was capable of responding positively to urine from a known pregnant woman and that the same fish would not react to the urine from a patient who was not pregnant. Although a great number of tests have been carried out, only those run subsequent to Aug. 1, 1934, at which time our supply of fish was standardized, are included in this report. In this process of standardization it was found that some fish did not respond to pregnancy urine because of immaturity or stunted size, while others of apparently mature size were refractory to the active principle for some unknown reason. Because of the number of fish that fell in this classification, it is imperative that this standardization process be carried out. After a positive test it requires from fourteen to twenty days for the ovipositor to return to its normal length, during which time the fish cannot be used for testing purposes.

TECHNIC

A previously standardized fish is put in a two quart bowl which contains one quart of water at the proper temperature, about 75 F. The fish is observed to make certain that the oviduct is not beyond normal limits. Four cc. of the urine to be tested is put into this water. The fish is observed at twenty-four hour intervals. If the test is found to be positive after the first twenty-four hours the test is discontinued; if negative, it must be carried out for seventy-two hours before a definitely negative report may be given, in spite of the fact that about 80 per cent of our positives were positive at the end of the first twenty-four hours. Normally the oviduct is about 2 mm. in length and reaches less than half the distance to the end of the ventral fin. With a positive reaction the ovipositor reaches past the edge of the ventral fin or to a length of 15 to 25 mm. After the test is completed the fish is put into a tank for recovery and left for from two to three weeks in order to allow for the regression following the positive reaction. It may then be used for other tests.

RESULTS

At the outset it was deemed advisable to run the fish tests parallel to Friedman tests in order to determine the relative merits of the two. The laboratories of the Presbyterian and Mount Sinai hospitals graciously cooperated with us in this work by giving us urines and reports on their Friedman tests. To date we have thirty-one such tests, with twenty-seven absolute checks and four discrepancies between the two tests. The four cases in which there were differences of result are as follows:

1. An ectopic pregnancy, ruptured, proved at operation. Fish test positive. Friedman test negative.

Read before the Chicago Gynecological Society, Nov. 16, 1934.
From the Obstetric and Gynecologic Clinic of Prof. N. S. Heaney, Rush Medical College of the University of Chicago.

1. Saphir, William: Artificial Production of the "Wedding Dress" in Chrosomus Erythrogaster, Proc. Soc. Exper. Biol. & Med. **31**: 864-866 (April) 1934.

2. Tozawa, Tomizya: Experiments on the Development of the Nuptial Coloration and Pearl Organs of the Japanese Bitterling, Folia Anat. Japon. **7**: 407-417, 1929.

3. Fleischmann, Walter, and Kann, Susanne: Ueber eine Funktion des weiblichen Sexualhormons bei Fischen (Wachstrum der Legerohre des Bitterlings), Arch. f. d. ges. Physiol. **230**: 662-667, 1932.

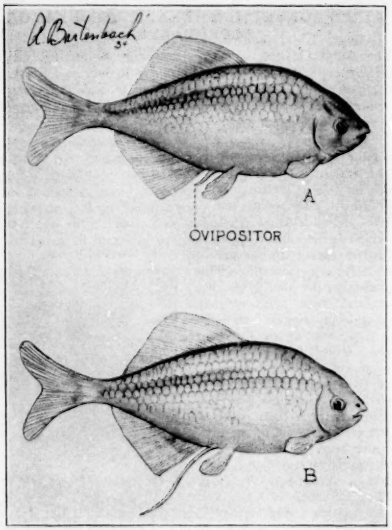
4. Szusz, Ferenc: Researches Conducted with Rhodeneus Amarus for Determination of Early Pregnancy, Orvosi Hetil. **77**: 905-906 (Oct. 7) 1933; Untersuchungen mit Bitterlingen zur Erkennung der Schwangerschaft, Monatschr. f. Geburtsh. u. Gynäk. **96**: 292-296 (March) 1934.

2. Woman, aged 51; three months amenorrhea with subsequent menstruation. Fish test positive. Friedman test negative.
3. Patient four days beyond expected date for menstruation. Sterile five years. Fish test negative. Friedman test positive. Pregnancy still unproved. Later fish test positive.
4. Patient four days past expected menstruation. Fish test negative. Aschheim-Zondek test (commercial laboratory) negative. Six days after expected menstruation, fish test negative, Friedman test positive. Twelve days after expected period, fish test negative. Histologic studies of curettage material revealed the presence of a very early pregnancy.

There have also been tests run on five ectopic pregnancies proved at operation, which have all been positive but which had not been checked against the Friedman test.

COMMENT

We believe that we have a test for some element which exists in excess in the urine of pregnant women, most probably estrogenic substance. From a study of the literature and its correlation with our observations such



Japanese bitterling (Acherlognathus intermedium): *A*, normal, or negative, test; *B*, positive test.

a conclusion can be reached. First, the authors referred to all had uniformly positive results with the use of estrogenic hormones and fairly consistent negative results with anterior pituitary extracts. Boiling destroys the gonadotropic factor of pregnancy urine, yet boiled urine gave results identical to those obtained with unboiled urine. At certain times in the life of a woman there is a physiologic excess of the follicular hormone, particularly during the onset of the menopause, and we take the liberty of citing case 2 as being illustrative of this, explaining the negative Friedman test on the basis that that test is dependent on the presence of an excess of anterior pituitary-like gonadotropic hormone rather than estrogenic substance. Several tests that we have carried out with some commercial products have given positives with estrogenic preparations and negatives with gonad-stimulating products.

Our results will probably be more consistent and better classified when we have developed our technic both for handling the fish and for the actual carrying out of the tests. This test will prove of clinical value with advantages over the Aschheim-Zondek and the Friedman test. The fish are primarily cheaper than rabbits or mice, are easier to maintain because of the small amount of space, food and care required in their handling, and at the end of the test it is not necessary to operate on the experimental animal and destroy it, as the fish may be used repeatedly for testing purposes. Another point in favor of this test is the fact that most positive results are obtained in twenty-four hours, while the other tests must run from forty-eight to seventy-two hours.

Should our predictions prove correct, the fields of research that may be opened by such a test are virtually boundless. To cite a few problems that we contemplate attacking as soon as our supply of test animals becomes sufficiently numerous: quantitative determinations for estrogenic substance at periods of physiologic and pathologic variation (menopause, puberty, various stages in the menstrual cycle, so-called functional amenorrheas, menorrhagias and metrorrhagias, and feminizing and defeminizing tumors); quantitative tests in hydatidiform mole and chorionepithelioma; tests for the presence of excess hormones associated with fibroid tumors and malignant conditions; methods of assay for the retention of potency and standardization of commercial hormone products; tests for the differential diagnosis of ectopic pregnancy. It is very important that we determine at an early date the time during pregnancy when the positive test first appears and the time during the puerperium when the test becomes negative.

310 South Michigan Avenue — 55 East Washington Street.

Clinical Notes, Suggestions and New Instruments

SUPERIOR LARYNGEAL NEURALGIA RELIEVED BY OPERATION

DEAN H. ECHOLS, M.D., AND JAMES H. MAXWELL, M.D.
ANN ARBOR, MICH.

True neuralgia of the superior laryngeal nerve is a distinct clinical entity comparable to trigeminal and glossopharyngeal neuralgia. It is characterized by paroxysms of unilateral, lancinating pain, which radiates from the side of the thyroid cartilage to the angle of the jaw and sometimes to the ear. There is a trigger zone at the plica of the nerve in the pyriform sinus. The pain is ordinarily initiated by swallowing but can be produced by touching the trigger zone with a probe. The other objective finding is a pressure point on the skin surface just above and lateral to the thyroid cartilage, where the sensory branch of the nerve pierces the hyothyroid membrane. Between the seizures, which may last from a few seconds to a minute, the patient is free from discomfort. As in other cranial nerve neuralgias, the attacks usually appear after middle age and increase in frequency and intensity. As a rule there is no disease of the pharynx or larynx present. Treatment directed at a coexisting tonsillitis or laryngitis is as futile as the extraction of teeth for tic douloureux. Superior laryngeal neuralgia should not be confused with the more or less constant pain due to a malignant condition or tuberculosis of the larynx and epiglottis. The laryngeal crises of tabes must also be ruled out. It is most important to differentiate it from glossopharyngeal neuralgia, in which syndrome the pain radiates to the ear from the tonsillar region, which is the trigger zone.

From the Departments of Neurology and Otolaryngology, University Hospital.

Although there are few case reports, especially in English, this condition is probably not uncommon. It was first described by Avellis [1] in 1900. Hutter [2] reported a series of cases, some of which were treated by alcohol injection. Bailey [3] and Harris [4] both consider this to be a clinical entity, and the latter reported a case cured by alcohol injection.

Before our case is presented, the anatomy of this nerve will be abridged as follows: It is a branch of the vagus, arises from the ganglion nodosum, descends by the side of the pharynx behind the internal carotid artery, and divides into the internal and external branches. The internal branch, which is the one concerned in our report, pierces the hyothyroid membrane and is distributed to the mucous membrane of the epiglottis, the base of the tongue, and the larynx above the vocal folds. The external branch is largely motor, supplying mainly the cricothyroideus.

REPORT OF CASE

N. K., a mechanic, aged 51, was admitted in September 1933. Nine months previously he began to have lancinating, burning pains in the left side of the neck, which radiated from the thyroid cartilage toward the angle of the jaw. At first the attacks were infrequent and lasted only a few seconds, but they gradually increased in number and duration. He was often awakened at night. Later he became aware that swallowing produced the pain. Considerable weight had been lost.

Observation showed that the patient was having attacks of excruciating pain about every twenty minutes. During the seizures, which rarely lasted over ten seconds, he would press the hand on the neck and hold the breath. Between the paroxysms he was comfortable but apprehensive.

Examination showed mildly inflamed tonsils, and a smooth, pea-sized nodule on the left vocal cord. The cords functioned normally. The cranial nerves were negative except for a tendency of the tongue to protrude to the right. The uvula rose in the midline on phonation and the gag reflex was present. Probing the tonsillar region caused no pain. Sensation was normal over the entire tongue and palate. There were no sensory changes on the neck, but there was a point, just above and to the left of the thyroid cartilage, which was painful to pressure. Tendon reflexes were normal. The physical examination showed little more than moderate peripheral arteriosclerosis and an adenomatous goiter. The blood pressure was 110 systolic, 60 diastolic. The Kahn test was negative. Urinalysis showed a trace of sugar on two occasions. Roentgenograms showed normal lungs and an increase in thyroid tissue with deposits of calcium.

Several days after admission, the vocal cord nodule was excised but without relief. Microscopic examination showed chronically inflamed and dilated mucous gland ducts. On two occasions complete relief from pain was obtained for a ten hour period by the injection of 1 per cent procaine hydrochloride into the region of the internal branch of the superior laryngeal nerve. The nerve was located by probing with the needle until the neuralgic pain was reproduced.

Under local anesthesia the hyoid attachments of the omohyoid and thyrohyoid muscles were sectioned (by J. H. M.) through a left collar incision at the level of the hyoid bone. The internal branch of the superior laryngeal nerve was exposed and identified by inserting a needle, typical pain being produced. Absolute alcohol was injected and a 1.5 cm. section of nerve excised. Microscopically, it showed congestion.

When last heard from, seven months later, the patient was in good health and completely free from pain.

COMMENT

The similarity of laryngeal, trigeminal and glossopharyngeal neuralgia was strikingly demonstrated by this case. The essential difference lies in the location of the trigger zone and the distribution of the pain. Our patient suffered paroxysms of lancinating pain in the side of the neck which were brought on by swallowing. Between attacks he was entirely comfortable. Stimulating the nerve reproduced the pain, procaine injection gave temporary relief, and section gave permanent relief (seven months, plus).

As neuralgia frequently returns after section or alcohol injection of a peripheral nerve, it is possible that our patient may have a recurrence. In that event, section of the vagus nerve just above the ganglion nodosum will be considered. Although neuralgia should be looked on as a symptom and not a disease, the cause in most cases is unknown. The mild tonsillitis and small vocal cord cyst in our patient were undoubtedly incidental occurrences of no significance.

1. Avellis, G.: Typische Form von Kehlkopfneuralgie, München. med. Wchnschr. **47**: 1592 (Nov. 13) 1900.
2. Hutter, F.: Ueber Neuralgien des Nervus laryngeus superior, Monatschr. f. Ohrenh. **63**: 402 (April) 1929.
3. Bailey, Percival: Neuralgias of Cranial Nerves, S. Clin. North America **11**: 61 (Feb.) 1931.
4. Harris, Wilfred: Neuritis and Neuralgia, London, Oxford University Press 1926.

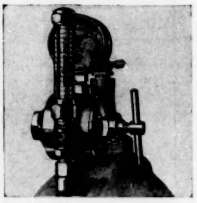
Council on Physical Therapy

THE COUNCIL ON PHYSICAL THERAPY HAS AUTHORIZED PUBLICATION OF THE FOLLOWING REPORT. HOWARD A. CARTER, Secretary.

AIRCO OXYGEN THERAPY REGULATOR ACCEPTABLE

The Airco Oxygen Therapy Regulator, Style 8481 (Float-Gage Type), is manufactured by the Air Reduction Sales Company, Jersey City, N. J. The purpose of this instrument is to control and to meter the flow of oxygen to a tent, chamber, catheter or inhaler.

This regulator is known as a double reduction or two stage regulator; that is, there are two stages of pressure reduction. In the first stage the pressure is reduced from cylinder pressure, which may be as high as 2,000 pounds per square inch, down to approximately 65 pounds per square inch. In the second stage this 65 pound pressure is reduced to a pressure the exact value of which is determined by the degree of strain imparted to the adjusting spring by means of the adjusting screw. (This second-stage pressure in no case is greater than approximately 15 pounds per square inch for a full scale reading of the float gage.) It will be seen that the oxygen entering the regulator, after passing through the glass wool filter, is permitted to discharge from the high pressure nozzle under control of the high pressure seat. The high pressure seat is carried in the short end of a valve lever the exact position of which is determined by the position of the high pressure diaphragm. If the pressure beneath this diaphragm tends to fall at any time, the first stage control spring forces the diaphragm inward and consequently rocks the lever in such a manner as to permit a freer discharge of oxygen from the high pressure nozzle, so that the pressure beneath the diaphragm is again restored to its normal level. The reverse takes place in case the pressure beneath the diaphragm tends to become excessive. The result is that a rate of discharge from the nozzle is maintained equal to the rate of discharge from the regulator.



Airco Oxygen Therapy Regulator.

The oxygen leaves the high pressure stage of the regulator by means of two diagonal vent holes in the guide thimble and then through the annular space afforded between the low pressure seat and the low pressure valve lip, the latter being machined directly into the regulator body. The discharge through this low pressure valve into the low pressure cavity is under control of the low pressure diaphragm and the adjusting spring. Any tendency for the pressure in the low pressure chamber to drop is compensated by an inward movement of the diaphragm, a greater separation of the low pressure seat from the valve lip and consequently a greater discharge of gas into the low pressure cavity. The reverse is true for any tendency for the delivery pressure to increase.

The oxygen leaving the regulator passes directly into a flowmeter of the float-gage type in which the upward movement of the oxygen through a transparent, divergently tapered tube causes a stainless steel ball to rise to a level that is proportional to the rate of flow. The meter is graduated in liters per minute from 0.5 liter to 15 liters.

One unit was investigated in a clinic acceptable to the Council. The claims of the manufacturer were substantiated. The Airco Oxygen Therapy Regulator, therefore, is included in the Council's list of accepted devices.

Committee on Foods

ACCEPTED FOODS

THE FOLLOWING PRODUCTS HAVE BEEN ACCEPTED BY THE COMMITTEE ON FOODS OF THE AMERICAN MEDICAL ASSOCIATION FOLLOWING ANY NECESSARY CORRECTIONS OF THE LABELS AND ADVERTISING TO CONFORM TO THE RULES AND REGULATIONS. THESE PRODUCTS ARE APPROVED FOR ADVERTISING IN THE PUBLICATIONS OF THE AMERICAN MEDICAL ASSOCIATION, AND FOR GENERAL PROMULGATION TO THE PUBLIC. THEY WILL BE INCLUDED IN THE BOOK OF ACCEPTED FOODS TO BE PUBLISHED BY THE AMERICAN MEDICAL ASSOCIATION.

RAYMOND HERTWIG, Secretary.

BORCHERDT'S DRI-MALT SOUP EXTRACT WITH ADDED POTASSIUM CARBONATE

Manufacturer.—Borcherdt Malt Extract Company, Chicago.

Description.—Powdered, nondiastatic malt extract containing added potassium carbonate.

Manufacture.—Borcherdt's Malt Soup Extract with added potassium carbonate (THE JOURNAL, Nov. 24, 1934, p. 1623) is further evaporated in "vacuum" at 71 C. to a powder and packed in cans.

Analysis (submitted by manufacturer).—

	per cent
Moisture	3.8
Ash	2.9
Potassium carbonate	1.4
Fat (ether extract)	0.0
Protein (N × 6.25)	8.7
Reducing sugars as maltose	71.1
Dextrins (by difference)	13.5

Calories.—3.7 per gram; 105 per ounce.

Claims of Manufacturer.—Used in the preparation of Keller's Malt Soup, also as a laxative modifier in the diet of obstinate cases of constipation in bottle fed babies.

VITAMIN D FORTIFIED PASTEURIZED MILK

Distributors.—

Amsterdam Dairy, Schenectady, N. Y.
Baker's Dairy, Boise, Idaho.
Blue Ribbon Creamery, Jackson, Miss.
The Guernsey Dairy Company, Owosso, Mich.
Lawrence Sanitary Milk & Ice Cream Co., Lawrence, Kan.
Peerless Dairy, Ltd., Windsor, Ontario, Canada.
M. H. Renken Dairy Co., Brooklyn.
Sanitary Dairy Company, Muskegon, Mich.
Sturtevant Ice Cream Company, Rock Island, Ill.
Superior Dairy Company, Davenport, Iowa.
Vitex Laboratories, Tacoma, Wash.
West Coast Dairy, Everett, Wash.
Williamsport Milk Products Co., Inc., Williamsport, Pa. (Hurr's)
Yakima Laboratories, Yakima, Wash.
York Sanitary Milk Company, York, Pa.

Description.—Bottled pasteurized milk fortified with vitamin D (vitamin D concentrate prepared from cod liver oil); contains 400 U. S. P. X (Revised, 1934) vitamin D units per quart.

Preparation.—The milk complies with legal requirements and is pasteurized by the standard holding method. See THE JOURNAL, July 1, 1933, page 34, for description of fortification with vitamin D.

Vitamins.—The vitamin D concentrate used and the fortified milk are regularly tested biologically. Clinical investigation shows this milk to be a reliable antirachitic agent, if the proper amount is used.

Claims of Distributors.—A vitamin D fortified, antirachitic pasteurized milk having otherwise the flavor and food values of usual pasteurized milk.

NOURON

Manufacturer.—Nouron Products Corporation, New York.

Description.—Dried granules of a dough composed of soy beans, whole durum wheat flour and dried egg yolk.

Manufacture.—Washed soy bean is softened with steam, mashed and mixed with formula proportions of whole wheat flour and egg yolk in a macaroni mixing machine. The dough is mechanically kneaded, forced by hydraulic pressure through dies containing small apertures, cut into small pieces by revolving knives, and dried on trays by air currents. The method of manufacture is essentially that for the preparation of macaroni.

Analysis (submitted by manufacturer).—

	per cent
Moisture	5.8
Ash	2.4
Fat (ether extraction method)	9.3
Protein (N × 6.25)	26.2
Reducing sugars before inversion as dextrose	2.0
Reducing sugars after inversion as dextrose	7.0
Sucrose (copper reduction method)	4.8
Crude fiber	3.1
Carbohydrates other than crude fiber (by difference)	54.2
Lipoid phosphoric acid as P_2O_5	0.049
Calcium (Ca)	0.10
Phosphorus (P)	0.16
Iron (Fe)	0.0016
Copper (Cu)	0.0012
Manganese (Mn)	0.01

Calories.—3.9 per gram; 111 per ounce.

KRIM-KO CHOCOLATE FLAVORED DRINK

Bottlers and Distributors.—

Better Dairy, Barnesville, Ohio.
Burnett Brothers Dairy, Bradenton, Fla.
Excelsior Sanitary Dairy, Frederick, Md.
Lorain Creamery, Lorain, Ohio.
George E. Lucas Dairy, Massillon, Ohio.
Med-O-Bloom Dairy, Kokomo, Ind.
Miami Home Milk Producers Assn., Miami, Fla.
Oatman Brothers, Inc., Aurora, Ill.
Peters Dairy, Michigan City, Ind.
The Producers Milk Co., Cleveland.
Riggle Dairy, Newcomerstown, Ohio.
St. Paul Milk Company, St. Paul.
Sunbury Milk Products Co., Sunbury, Pa.
Sunshine Farms, Inc., Lafayette, Ind.
Superior Dairy, Canton, Ohio.
The Sycamore Dairy, Haines City, Fla.
Victory Creamery, Emporia, Kan.
Virginia Dairy Company, Richmond, Va.
Warren County Dairy Assn., Warren, Pa.
Wendt's Dairy, LaSalle, N. Y.
Williamsville Dairy, Williamsville, N. Y.
Willowcreek Dairy, St. Clairsville, Ohio.
Winona Milk Company, Winona, Minn.
Woodlawn Farms Dairy, Kirkwood, Mo.

Licenser.—Krim-Ko Company, Chicago, manufactures the Krim-Ko Chocolate Flavored Drink Base and licenses its use, the name Krim-Ko, and standard advertising under definite contract conditions.

Description.—Pasteurized chocolate flavored sweetened skim milk; contains skim milk (from 0.5 to 1.5 per cent milk fat), sucrose, chocolate and cocoa, tapioca flour, salt and traces of tartaric acid and agar; flavored with imitation vanilla extract. See Krim-Ko Chocolate Flavored Drink, THE JOURNAL, June 30, 1934, page 2187.

THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION

535 NORTH DEARBORN STREET - - - CHICAGO, ILL.

Cable Address - - - - - "Medic, Chicago"

Subscription price - - - - - - Seven dollars per annum in advance

Please send in promptly notice of change of address, giving both old and new; always state whether the change is temporary or permanent. Such notice should mention all journals received from this office. Important information regarding contributions will be found on second advertising page following reading matter.

SATURDAY, DECEMBER 29, 1934

THE MOTION OF GROWTH

Just what growth is, why it happens, how it can be influenced and why it is frequently abnormal are questions of great importance. This is especially true in relation to the great advances that have been made in our knowledge of nutrition. Heretofore most of the studies of growth have dealt mainly with the determination of changes in weight and height, the statistical analysis of these values and the correlation between them.

In a recent series of publications with the general title "On the Motion of Growth," Norman C. Wetzel has indicated clearly that there is little to be learned from more studies of growth that are limited in their scope to the measurement of absolute changes in weight and height alone. This investigator regards growth as a mode of motion and treats it by the methods of energetics and classic dynamics. This fundamental and original method of attacking the problem has necessitated critical redefinition of the phenomena of growth and metabolism.[1] Wetzel concludes that growth is determined by at least four distinct quantities, which he has termed the "resistance," "inductance," "permittance" and "net external work."[2] By the interplay of these four quantities the rate of growth is determined, and the latter is affected by alteration of any one or of more than one of these factors. The dependence of the rate of growth on these four quantities Wetzel has shown in a general mathematical expression.[2a]

The most remarkable single contribution in this series of studies appears to be the finding of a direct dynamic relation between basal metabolism and growth.[3] This is of great interest in the case of human beings, especially infants and children.[4] Wetzel has developed the first mathematical expression from which can be constructed ideal curves of both cumulative gain in weight[5] and basal heat production[3a] in man, from the early fetal to the adult stage. These studies make it possible to comprehend the difference between the metabolism of youth and of old age, whether in bacteria,[3b] plants, tissues in vitro, amphibians,[3c] birds, lower mammals, or man.[6] In all these, according to this author, his fundamental equation is satisfied.[2a]

Of significance is the establishment for the first time[7] of a critical period in the life of a human being at birth, at which time there is a maximum rate of gain. Of still greater practical significance is the finding of a minimum rate of gain,[5] rate of growth[6] and basal heat production[3a] at the end of the period of infancy, at which time there is "comparative rest in the motion of growth." These three curves remain at an unusually low level for several years following the end of infancy, offering an explanation for the well known poor appetite and failure to gain of children in this age period.

In these studies,[8] starvation (in which the rate of growth is negative) and its effect on heat production have received the consideration they deserve. Wetzel has been led to conclude[6] that excessive rate of gain during infancy and childhood is accompanied by an even greater rate of wasteful heat production. This may be a matter of serious concern in the case of the premature infant, for whom an excessive rate of gain may have grave consequences. By establishing a relationship between heat production and growth, Wetzel has thrown new light on data already available[3c] and has given a new stimulus to the study of the fundamentals underlying the phenomenon of growth in general.

1. Fundamental Relations and Quantities of Growth and Metabolism, Proc. Soc. Exper. Biol. & Med. **30:** 1044 (May) 1933.
2. (*a*) Introduction to the Energetics of Growth and Metabolism, Proc. Soc. Exper. Biol. & Med. **30:** 224 (Nov.) 1932. (*b*) Footnote 1.
3. (*a*) The Determination of and the Energetics of Human Basal Metabolism, Proc. Soc. Exper. Biol. & Med. **30:** 233 (Nov.) 1932. (*b*) Energetics of Bacterial Growth and Heat Production, ibid. **30:** 360 (Dec.) 1932. (*c*) The Connection Between Growth and Heat Production in the Amphibian Bufo Vulgaris from Fertilization to Metamorphosis, Proc. Nat. Acad. Sc. **20:** 183 (March) 1934.
4. Prolegomena to the Clinical Study of Human Growth and Metabolism, J. Pediat. **3:** 252 (July) 1933.
5. Human Growth in Weight from Early Fetal to Adult Life, Proc. Soc. Exper. Biol. & Med. **30:** 227 (Nov.) 1932.
6. Clinical Aspects of Human Growth and Metabolism, with Special Reference to Infancy and Preschool Life, J. Pediat. **4:** 465 (April) 1934.
7. Footnotes 5 and 6.
8. Further Analysis of Energetics of Heat Production, with Special References to Basal Metabolism During Prolonged Human Fasting, Proc. Soc. Exper. Biol. & Med. **30:** 354 (Dec.) 1932; Rate of Loss in Weight for Minimum Metabolism, ibid., p. 358.

PUERPERAL GYNECOLOGY

In the development of obstetrics, few contributions have been so worthy of note as to constitute landmarks. Invention of the obstetric forceps, recognition of the cause of puerperal infection, the use of anesthesia, the development of the various technics of delivery, and recently the fundamental studies in endocrinology with their one important practical result, the pregnancy test, might be mentioned as of great significance. The uncertainties and hazards of childbirth have been materially reduced; the end results, however, as has been pointed out repeatedly, are still not all that they might be. The newer contributions to obstetrics are unfortunately not universally applied; the incidences of morbidity and of mortality remain all too high. Apart from these, what may be termed remote morbidity, and even mortality

V 19

not immediately credited to childbirth, are factors in the health of the community that receive little attention. The poor health of the woman with relaxed perineal and pelvic structures for varying periods of years following delivery or the plight of the woman with lacerations and erosions of the uterine cervix, which later becomes the seat not only of infection but ultimately of malignant change, may often reasonably be charged against obstetrics. Thus it is recognized that the concern of the obstetrician really does not cease with delivery of the baby and survival of the mother; the subsequent health of the mother should in considerable degree be his responsibility also.

In the trend of the clinician to specialize, obstetrics and gynecology have branched apart. Perhaps this schism has become too great. Bubis [1] has pointed out the tremendous advantage to the parturient entailed in the immediate, or almost immediate, repair of the genital tract. Relaxation of the birth canal and laceration of the cervix are said to occur in at least 75 per cent of women who have borne one or more children. Often this may consist only of a small tear in the cervix, a slight displacement of the uterus, a tendency to cystocele or urethrocele, or a small laceration or slight relaxation of the perineum. But, as Bubis has emphasized, no such lesion is small enough to neglect, as nature rarely cures even these satisfactorily. Thus he has reported [2] 1,353 cases in which immediate or semi-immediate gynoplastic repair was done with a low morbidity rate and an unusually low mortality rate. The subsequent health of the parturients, relative to gynecologic complaints, was unusually good. In addition, a tremendous economic and sociological advantage accrued to these patients. Many of them, had they not had immediate surgical treatment, would have had to return to the hospital at some subsequent time for this attention; others would have gone through life with the ill health attendant on the damage resultant from parturition, in many cases with superimposed pathologic changes, which similarly often fail to be treated. The advantage to the patient of a single rather than of two or more sojourns in the hospital must be obvious. Bubis has estimated that the resultant economic saving to the community in his series of 1,353 cases alone, in the obstetric service of but a single hospital, amounted to more than $450,000. This must be a small item, however, compared to the benefit to the health of these women, who in many cases were spared years of semi-invalidism. Only a comparatively small proportion of patients find it expedient to return to the hospital for subsequent treatment; others go through years of needless physical disability.

These procedures, while advocated by many obstetricians, have been criticized by other obstetricians and by gynecologists on various grounds. The contusion of the tissues incident on parturition, it is said, makes the extent of the injury difficult to evaluate and renders the parts unsuitable for extensive repair. Hemorrhage is said to be more severe and the incidence of infection higher than normal. Other objections also have been raised. But the fact that in recent years a considerable number of obstetricians have adopted, with notable success, immediate or semi-immediate gynoplastic repair as a standard procedure indicates that in experienced hands (in those cases in which certain pathologic conditions and infections do not render it unsafe) the hazard of this type of surgery is not prohibitive and the advantages are considerable.[3]

1. Bubis, J. L.: The Immediate Repair of the Cervix After Childbirth, Cleveland M. J. **17**: 149 (March) 1918; The Relation of the Immediate Intermediary Operation to Modern Obstetrics, Ohio State M. J. **19**: 259 (April) 1923; Ten Years' Experience with Gynoplastic Repairs of Old Lacerations Following Childbirth, with Report of 1,019 Cases, Am. J. Obst. & Gynec. **16**: 57 (July) 1928; Ohio State M. J. **25**: 109 (Feb.) 1929; The Interrelation Between Obstetrics, Gynecology and Abdominal Surgery, ibid. **25**: 711 (Sept.) 1929; Physical and Economic Advantages of Gynoplastic Repairs for Old Lacerations at or Shortly After Childbirth, J. Michigan M. Soc. **30**: 418 (June) 1931; Tr. Sect. Obst., Gynec. & Abd. Surg., A. M. A., 1931, p. 128.

2. Bubis, J. L.: Puerperal Gynecology, West. J. Surg. **41**: 411 (July) 1933.

AMINO ACID—GLYCINE—THERAPY IN THE MYOPATHIES

Recent investigations of the influence of amino acid therapy on the unbalanced creatine-creatinine metabolism associated with certain types of myopathies have yielded interesting results. These appear to be of particular significance when the alterations in creatinuria are related to the favorable prognosis in this clinical syndrome. Gibson and Martin [1] and Brand, Harris, Sandberg and Ringer [2] were among the first to recognize the importance of glycine[3] in their investigations of the origin of creatine. The latter workers showed that the ingestion of this amino acid or of gelatin, which is high in glycine, by patients with progressive muscular dystrophy was followed by a large increase in the creatinuria. This significant relationship between glycine, a substance that the normal person can readily synthesize, and creatine, which has been demonstrated to play an important part in muscle function, suggested to several investigators that the prolonged administration of the amino acid might have an influence on the clinical and metabolic course of muscular dystrophy. Striking confirmation of this hypothesis was reported from the laboratory of Karl Thomas in Leipzig.[4] Six cases were studied during eight experimental periods each of a few months' duration. The daily ingestion of from 15 to 20 Gm. of glycine increased the daily excretion of creatine to a value that was from 100 to 1,000

3. Bishop, Eliot: Recent Advances in Obstetrics, Long Island M. J. **23**, June-August, 1929. Wood, G. A.: Cervical Inspection and Repair, with Special Reference to Primary Cervical Repair, New York State J. Med. **30**: 1150 (Oct. 1) 1930. Bloss, J. R.: Advisability of Repairing Old Lacerations of Cervix and Perineum at Time of Subsequent Delivery, J. South. M. A. **27**: 439 (May) 1934; The Obstetrical Application of Surgical Progress, West Virginia M. J. **30**: 337 (Aug.) 1934.

1. Gibson, R. B., and Martin, F. T.: J. Biol. Chem. **49**: 319 (Dec.) 1921.

2. Brand, Erwin; Harris, M. M.; Sandberg, M., and Ringer, A. I.: Studies on the Origin of Creatine, abstr. Thirteenth International Physiological Congress, Boston, 1929, p. 29.

3. Glycine, which is amino-acetic acid, should not be confused with a photographic developer sold under the trade name of "Glycin," which is parahydroxyphenylamine-acetic acid and is poisonous.

4. Milhorat, A. T.; Techner, F., and Thomas, Karl: Proc. Soc. Exper. Biol. & Med. **28**: 609 (Feb.) 1932. Milhorat, A. T.: Deutsche med. Wchnschr. **59**: 169 (1933).

per cent higher than the previous creatinuria level. After a period of some weeks the creatinuria began to decrease despite the continued administration of glycine, falling finally to the former control level. Coincident with this diminished creatinuria there was an increased excretion of creatinine and an improvement in the patients' ability to retain ingested creatine. These interesting alterations in the metabolism were accompanied by remarkable improvement in the condition of the patients. Muscles that previously had felt tired now seemed refreshed and the patients often expressed the desire to make muscular movements that had not been possible for a considerable period. Interruption of the glycine treatment resulted in a gradual disappearance of the improvement, and the disease eventually returned to its previous status. Resumption of the glycine administration again resulted in the previously described improvement.

These important results have stimulated many clinicians to use glycine, with and without ephedrine, in the treatment of various types of myopathies. However, conflicting opinions have arisen regarding the various metabolic relationships and therapeutic effects following either glycine or glutamic acid therapy, the latter amino acid having also been found to be efficacious by some workers. This disagreement is probably due to a considerable extent to the failure to distinguish accurately the various types and stages of muscular dystrophy and to evaluate correctly those muscular atrophies which are secondary to pathologic lesions in the central nervous system. A good summary of this literature, together with an account of metabolic studies on thirty-four patients, representing eleven distinct types of myopathies and atrophies, has been recently presented by investigators of the Louisiana State University Medical Center.[4] Either glycine or glutamic acid therapy was demonstrated to be capable of augmenting the creatinuria present in each of ten different types of cases. Concomitant with this increased excretion of creatine, an objective and subjective improvement was present, the magnitude of which was dependent on the nature of the myopathy. In general, the cases classified as primary myopathies and myasthenia gravis showed distinct clinical improvement, except in a few cases of the former type in which the disease had advanced to the stage of complete muscle degeneration. However, while some of the muscular dystrophies were greatly benefited, no objective improvement was observed in the neuromuscular atrophies, despite the fact that the creatinuria present was influenced by the amino acid therapy. In a few instances of the latter disease there was subjective improvement or merely an arrest of symptoms.

These investigations serve to emphasize anew the importance of the amino acid treatment in certain of the myopathies, to add metabolic evidence of the differences existing among these various muscle diseases, and to elucidate the function and importance of creatine and creatine precursors in muscle physiology.

4. Tripoli, C. J.; McCord, W. M., and Beard, H. H.: Muscular Dystrophy, Muscular Atrophy, Myasthenia Gravis and Strabismus, J. A. M. A. **103**: 1595 (Nov. 24) 1934.

Current Comment

FEDERAL FOOD AND DRUGS ACT APPROPRIATIONS

For the enforcement of the federal Food and Drugs Act during the current fiscal year, which ends June 30, 1935, Congress appropriated $1,161,477. Thus, Congress authorized the expenditure of less than one cent each for every man, woman and child in the United States to protect them during an entire year from the dangers of adulterated and misbranded food and drugs. The appropriation for the current year, too, shows a decrease as compared with the appropriation for the fiscal year ended June 30, 1934, which in turn was less than the appropriation for the preceding fiscal year. This apparent tendency to appropriate less and less money for the enforcement of the federal Food and Drugs Act seems hardly consistent with the increasing federal expenditures in other fields. Irrespective of the outcome of proposals to revise the federal Food and Drugs Act now in force, so as to increase its protective value, the Seventy-Fourth Congress, which convenes January 3, should not hesitate to make available funds sufficient to afford the utmost protection to consumers that is possible under the existing law. The officials of the Food and Drugs Administration will, it may be assumed, give to Congress facts on which it may form an intelligent judgment when it considers the appropriation for carrying on such activities. Elsewhere in this issue appears a résumé of the activities during November. These are but a slight indication of the good that this department, with sufficient support, might accomplish for the health of our people. There is much talk of new legislation. Why not make even more effective the provisions we now have for this service?

Association News

MEDICAL BROADCASTS

Columbia Broadcasting System

The American Medical Association broadcasts on a Western network of the Columbia Broadcasting System each Thursday afternoon on the Educational Forum from 4:30 to 4:45, central standard time. The next three broadcasts will be delivered by Dr. W. W. Bauer. The titles will be as follows:

January 3. Housing and Health.
January 10. Diphtheria Must Go.
January 17. The Good Old Days.

National Broadcasting Company

The American Medical Association broadcasts under the title "Your Health" on a Blue network of the National Broadcasting Company each Tuesday afternoon from 4 to 4:15, central standard time. The two broadcasts will be as follows:

January 1. Holiday. No broadcast.
January 8. Research in Surgery, Thomas S. Cullen, M.D.*
January 15. Causes of Death in 1933, W. W. Bauer, M.D.

* Dr. Cullen will speak from the National Broadcasting Company's Studios in Washington, D. C., by special arrangement.

Medical News

(PHYSICIANS WILL CONFER A FAVOR BY SENDING FOR THIS DEPARTMENT ITEMS OF NEWS OF MORE OR LESS GENERAL INTEREST: SUCH AS RELATE TO SOCIETY ACTIVITIES, NEW HOSPITALS, EDUCATION, PUBLIC HEALTH, ETC.)

ARKANSAS

Personal.—Dr. Cad A. Henry, Clarendon, has been appointed director of the Saline County Health Department, succeeding Dr. T. C. Watson, who plans to engage in private practice.

Society News.—The Benton County Medical Society was entertained at dinner at Siloam Springs, November 8, by Dr. and Mrs. Lester L. Scott. Speakers were Drs. Lewis M. Henry, Fort Smith, on "Differential Diagnosis of Common Ear Conditions," and Frederick H. Krock, Fort Smith, "Carcinoma of the Cervix."——Dr. Jacques Forestier, Aix-les-Bains, France, discussed the treatment of arthritis before the Pulaski County Medical Society in Little Rock, November 30.

District Meetings.—Dr. William T. Pride, head of the department of obstetrics, University of Tennessee College of Medicine, Memphis, was the principal speaker before the Eighth Councilor District Medical Society at its meeting in Little Rock, December 5. Clinics formed the larger part of the scientific program. The eighth district encompasses the counties of Pulaski, Faulkner, Perry, Pope, Conway and Johnson.——Speakers before the Ninth Councilor District Medical Society in Harrison, December 4, included, among others, Drs. Herbert Fay H. Jones, Little Rock, on urologic backache, and Solomon F. Hoge, Little Rock, early syphilis.

CALIFORNIA

Society News.—A symposium on obstetrics was presented before the Alameda County Medical Association, December 17, by Drs. Theodore W. Weller, John W. Sherrick and Clarence A. DePuy, Oakland, and Clarence W. Page, Berkeley.——The Sonoma County Medical Society was addressed, November 8, by Dr. Thomas E. P. Gocher, San Francisco, on "Treatment of the Sympathetic Nervous System and Its Effect on Post-operative and Post-Traumatic Industrial Injuries."——At a meeting of the San Joaquin County Medical Society in Stockton, November 1, Dr. Carl L. Hoag, San Francisco, among others, discussed "Common Surgical Problems, with Special Reference to Appendicitis."——At a meeting of the San Bernardino County Medical Society, December 4, Drs. Donald H. Brumbaugh, Redlands, discussed "Hemorrhoids and Myles' Hemorrhoidectomy," and Norman J. Kilbourne, Los Angeles, "Local Anesthetics Producing Prolonged Anesthesia for the Elimination of Pain After Rectal Operations."——Dr. James W. Sherrill addressed the San Diego County Medical Society, December 11, on "Present Status of Diabetes Mellitus."——Attorney Joseph N. Sweet, San Francisco, addressed the Solano County Medical and Bar associations in Vallejo, November 13, on "The Problems and Opportunities of Our Professions."——The Los Angeles Society of Neurology and Psychiatry was addressed, November 21, by Drs. Charles LeRoy Lowman on "Orthopedic Reconstruction in Neurologic Cases" and Leo J. Adelstein, "Surgical Treatment of Brain Abscess."

CONNECTICUT

Fellowships for Study of Adolescence.—THE JOURNAL published a news item, December 8, announcing the establishment of five fellowships by the Rockefeller Foundation at Yale University School of Medicine for the study of adolescence. It was stated that "appointments are to be for two years and they are to expire in alternate years so that one of the two men will always have had one year's experience on the project." This quoted statement does not pertain to these scholarships but to a different project recommended by Dean Milton C. Winternitz in his annual report, the appointment of assistants to aid senior staff members in research.

ILLINOIS

Society News.—Dr. James R. Nakada, St. Louis, addressed the Belleville meeting of the St. Clair County Medical Society, December 5, on tularemia.——Dr. Irving H. Neece, Decatur, among others, addressed the La Salle County Medical Society in Streator, November 22, on "Importance of Hematuria in Diagnosis."——Dr. David J. Davis, Chicago, addressed the Kankakee County Medical Society, December 13, on "Relationship of the State University School of Medicine to the Medical Profession."

Chicago

Memorial to Dr. Billings.—A bronze tablet has been placed in the Country Home for Convalescent Crippled Children as a memorial to Dr. Frank Billings and bearing the inscription: "In Memory of Dr. Frank Billings 1854-1932, the great physician whose wise counsel and unfailing encouragement were an enduring benefaction to this home." The tablet is the gift of the home.

Medical Faculty Entertains Biologic Group.—The University of Illinois College of Medicine presented a program, December 7, when the biologic faculty from the university at Urbana visited the school. Speakers included the following:

Richard L. Webb, Ph.D., Mesenteric Lymphatics.
Dr. Lars F. Gulbrandsen, Passage of Bacteria Through Intestinal Wall.
Dr. William F. Petersen, Biologic Reflections of Meteorological Variability.
Dr. Eric Oldberg, The Contribution of Neural Surgery to Medicine.
Dr. Ernst Gellhorn, The Influence of the Oxygen and Carbon Dioxide Tensions of the Inspired Air on Sensory Processes.
Dr. Robert W. Keeton, Studies in Obesity.

Society News.—At a meeting of the Chicago Tuberculosis Society, December 13, Drs. Elven J. Berkheiser spoke on "Bone and Joint Tuberculosis"; Meyer R. Lichtenstein, "Immunity in Tuberculosis," and Leo L. J. Hardt, "Gastro-Intestinal Tuberculosis."——Speakers before the Chicago Surgical Society, December 14, included Drs. Alexander B. Ragins, who presented a clinical report of "Strangulated Hernia Simulating Appendicitis."——The Chicago Ophthalmological Society was addressed, December 17, among others, by Drs. Carl O. Schneider on "Use of Prosthesis Over Unsightly Eyes" and Harry S. Gradle, "Prevention of Blindness."——Speakers before the Chicago Society of Allergy, December 17, were Drs. Meyer R. Lichtenstein on "The Patch Test for Gold Hypersensitivity" and Ben Z. Rappaport, "Cartridge Method for Intracutaneous Tests."——Dr. Frederic J. Cotton, Boston, conducted an operative clinic at Cook County Hospital, December 20.

Personal.—Dr. David J. Davis has been made president of the Institute of Medicine of Chicago, succeeding Dr. Joseph L. Miller.——Mr. John B. Zingrone, roentgenologist of Mercy Hospital for twenty-two years, was awarded the Cross of Chevalier of the Order of the Crown of Italy at a banquet in his honor, December 6. Speakers included Mayor Edward J. Kelly, Dr. Philip H. Kreuscher, past president of the state medical society, and Dr. Julius H. Hess, president elect of the Chicago Medical Society.——Dr. John E. Gorrell, for the past two and one-half years assistant to the superintendent of the University of Chicago Clinics, resigned recently to become superintendent of the Falk Clinic at the University of Pittsburgh.——Miss Evelyn Wood, secretary, Central Council for Nursing Education and for the last five years president of the Illinois League of Nursing Education, died, November 27, of pulmonary embolism. Miss Wood was also secretary of the American Conference on Hospital Service.——Dr. Francis A. Dulak has been appointed a member of the Chicago Board of Health, succeeding Dr. Edward F. Dombrowski.

INDIANA

Society News.—The Seventh District Medical Society held a meeting in Martinsville, December 13; the program was devoted to symposiums on headache, dyspepsia, backache and chest pain.——A symposium on contagious diseases was presented before the Indianapolis Medical Society, December 18; speakers were Drs. Howard B. Mettel, Matthew Winters and Byron K. Rust. Dr. Howard Fox, New York, conducted a clinic on diseases of the skin before the society, December 11, and gave an address on common diseases of the skin.——Speakers before the Henry County Medical Society in Newcastle, November 22, were Drs. Charles R. Bird and Albert Murray De Armond, Indianapolis, and Clyde C. Bitler, Newcastle; their subjects were elementary diagnosis in everyday fracture, syphilis of the central nervous system, and Vincent's infection of the lung.——At a meeting of the Noble County Medical Society in Ligonier, December 4, Dr. Lyman T. Rawles, Fort Wayne, discussed sickness insurance and state medicine.——Dr. Oliver O. Alexander, Terre Haute, addressed the Sullivan County Medical Society in Sullivan, December 5, on cholecystitis and cholecystectomy.——A symposium on peptic ulcer constituted the program of the Clinton County Medical Society in Frankfort, December 6; speakers were Drs. Furman L. Pyke, Floyd A. Loop, Ray G. Ikins and Floyd T. Romberger, all of Lafayette.——The Jay County Medical Society, Portland, heard Dr. Grover C. Penberthy, Detroit, discuss the surgical treatment of children and the treatment of burns, December 7.

KENTUCKY

Society News.—Dr. William H. Park, New York, addressed the Jefferson County Medical Society, Louisville, December 3, on "B C G Vaccine and Its Control of Pulmonary Tuberculosis."——At a meeting of the Muldraugh Hill Medical Society, Elizabethtown, December 13, speakers were Drs. Charles L. Sherman, Millwood, on "Asepsis in the Home"; Robert Sory, Richmond, trachoma; Carl C. Howard, Glasgow, spinal anesthesia; William T. McConnell, Louisville, low forceps delivery, and Reason T. Layman, Elizabethtown, physical therapeutics. ——Speakers before the Third District Medical Society in Bowling Green in October included Drs. Milton S. Lewis, Nashville, on "Treatment of Eclampsia"; Owsley Grant, Louisville, "Extrarenal Symptoms of Renal Disease"; Virgil E. Simpson, Louisville, "Use of Serums and Vaccines," and Paul York, Glasgow, "Hematuria."—— Dr. Jacob Leland Tanner, Albany, addressed the Henderson County Medical Society, November 12, on "Treatment of Asthma."——Dr. Louis J. Karnosh, Cleveland, addressed the Campbell-Kenton County Medical Society, November 1, on "Difficulties in Cerebral Localization."

LOUISIANA

Society News.—Speakers before the Orleans Parish Medical Society in a symposium on cancer, December 10, were Drs. Edwin H. Lawson, Martin T. Van Studdiford and Ambrose H. Storck. The society was addressed, October 22, by Drs. Charles A. Bahn on "Recent Advances in the Treatment of Squint and Heterophoria" and by Hans E. A. Schroeder on "Glaucoma, a Nutritional Edema."

Personal.—Dr. Jackson J. Ayo, Raceland, has been named superintendent of the East Louisiana State Hospital at Jackson, succeeding the late Dr. John A. Thames.——Dr. Clarence Pierson, Pineville, was recently named special consultant to the three state eleemosynary institutions for the insane and feebleminded: Central Louisiana State Hospital, Pineville; East Louisiana State Hospital, Jackson, and State Colony and Training School, Alexandria. Thirty years of Dr. Pierson's life has been spent as superintendent of the Central and East Louisiana state institutions.

Uniform Narcotic Act Adopted.—At the November session of the legislature, the state narcotic law was repealed and supplanted with the uniform narcotic drug law, effective December 6. The new law makes the same requirements for prescribing, dispensing, administering, handling and dealing in narcotic drugs in the state as are in force under the federal law and regulations, with one exception: that cannabis and its derivatives, including marihuana, are included under the state law as narcotic drugs. The use of the state narcotic order forms is discontinued, the only form necessary being the federal narcotic order form. Filling and filing of prescriptions and keeping of records must comply with the federal regulations. Twelve states have enacted the new uniform narcotic drug act.

MARYLAND

Memorial to Dr. Keating.—A bronze plaque was recently dedicated at the Rosewood State Training School, Owings Mills, in commemoration of the late Dr. Frank W. Keating, superintendent for thirty-eight years. Dr. Keating died February 18.

Society News.—Speakers before the Maryland Academy of Medicine and Surgery, November 20, in Baltimore, were Drs. George E. Bennett and Dean Lewis on "Diagnosis and Treatment of Lumbosacral and Sacro-Iliac Lesions" and "Tumors of the Breast," respectively.

Personal.—Dr. John M. T. Finney, professor emeritus of surgery, Johns Hopkins University School of Medicine, Baltimore, has been appointed a consultant to the Baltimore City Health Department.——Dr. William E. Martin, Randallstown, has been appointed health officer for the second district of Baltimore County, succeeding the late Dr. Harry F. Shipley. ——Dr. Allan R. Dafoe, Callander, Ont., Canada, was the guest of Dr. Howard A. Kelly, Baltimore, recently.

MASSACHUSETTS

Personal.—Dr. George R. Minot, Boston, winner of the 1934 Nobel Prize in medicine, addressed the Royal Society of Medicine, London, November 29, on anemia.——Dr. Richard P. Strong, professor of tropical medicine, Harvard Medical School, Boston, has been named a member of the board of trustees of the Carnegie Institution.

Graduate Course.—The second annual graduate medical extension course of the Massachusetts Medical Society opened December 11 and concluded December 19. Sessions were conducted in various places throughout the state and the subjects considered were cardiovascular disease, nutrition in health and disease, endocrinology, obstetrics and gynecology, surgery and industrial medicine.

Roentgenograms of Freshman Class.—Roentgenograms of the chests of all members of the freshman class at Massachusetts State College, Amherst, were taken early in December to discover incipient respiratory diseases. This is the first time that an entire class has received the test, which, in the future, will be a part of the regular physical examination. The project, which is carried on in cooperation with the state department of health, is an extension of similar work in the secondary schools.

Society News.—It was voted to reestablish a cancer clinic in Franklin County at the meeting of the Franklin District Medical Society in Greenfield, November 13. Dr. Roderick Heffron, Boston, addressed the meeting on "Lobar Pneumonia and Its Serum Treatment."——Dr. Gerardo M. Balboni, Boston, discussed "The Development in the Treatment of Pulmonary Tuberculosis from 1696 to the Present Time."——At a meeting of the Greater Boston Medical Society, December 4, Dr. William Jason Mixter, Boston, discussed "Common Medical Symptoms in Neurologic Surgery."——The Boston Society of Anesthetists was addressed, December 4, by Dr. Stanley J. G. Nowak on "The Carotid Sinus and Its Relation to Various Anesthetics."

Free Medical Lectures at Harvard.—January 6 will mark the opening of a weekly course of free medical lectures by Harvard University Medical School, to continue until March 24. The following speakers will participate:

Dr. Roy G. Hoskins, Gland Factors in Personality.
Dr. Howard B. Sprague, What Causes Heart Disease?
Dr. Alice Hamilton, Dangerous Trades.
James O. Pinkston, Ph.D., The Body Temperature.
Dr. Henry D. Chadwick, Tuberculosis as a Children's Disease.
Harry C. Trimble, Ph.D., Minerals in Our Bodies and Our Foods.
Dr. Howard F. Root, Diabetes.
David B. Dill, Ph.D., External Influences on Physical Activity.
Dr. Elliott C. Cutler, Cancer.
George H. Parker, Sc.D., Twins and Social Biology.
Clarence B. Vaughan, D.D.S., Facts Regarding the Control of Diseases of the Gums.
Dr. Frederick C. Irving, Inheritance.

MICHIGAN

Cancer Survey.—Dr. Frank L. Rector, field representative of the American Society for the Control of Cancer, has been authorized to make a cancer survey of Michigan. The date to begin the survey has not been decided.

Personal.—Dr. Thomas H. Johnston, West Branch, director of the Children's Fund health unit number 2, comprising the counties of Alcona, Iosco, Oscoda and Ogemaw, has resigned on account of ill health after four years' service. He has been succeeded by Dr. Gladys J. Kleinschmidt, Ann Arbor.

Hospital News.—A new roentgenotherapy department was dedicated in Hackley Hospital, Muskegon, November 18, with Dr. James T. Case, professor of radiology, Northwestern University School of Medicine, Chicago, as the principal speaker. Dr. Leland E. Holly is head of the new department. The ceremony marked the thirtieth anniversary of the formal opening of the institution.

Meeting of School Physicians.—Four resolutions were adopted at a meeting of the Michigan Association of School Physicians in Lansing, November 8, which urged the enactment of suitable legislation requiring the examination of teachers, students and school health workers. The inclusion of the tuberculin test and roentgenograms in these examinations is a notable feature. Dr. John Sundwall, Ann Arbor, was elected president of the association; Dr. Clarence D. Barrett, Lansing, vice president, and Dr. Vladimir K. Volk, Pontiac, secretary.

MINNESOTA

State Society to Attend Science Meeting.—The eighty-second annual meeting of the Minnesota State Medical Association has been arranged to take advantage of the annual session of the American Association for the Advancement of Science at the Minneapolis Auditorium, June 24-26. There will be two joint sessions of the organizations, Tuesday morning and evening, June 25, at the University of Minnesota. Regular sessions of the science association will be confined to mornings so that members may attend the medical meetings in the auditorium in the afternoons.

Society News.—At a meeting of the Lyon-Lincoln Counties Medical Society in Tracy, November 11, the speakers were Dr. Francis J. Savage, St. Paul, president, and Mr. George Larson, field representative, of the Minnesota State Medical

V 1
193

Association.——The Red River Valley Medical Society was recently addressed at Thief River Falls by Drs. William G. Paradis, Crookston, on the comparative value of tuberculin tests; Edward Bratrud, urography with special reference to diagnosis, and Vernon L. Evans, Thief River Falls, tumors of the suprarenal.——At a meeting of the Renville County Medical Society at Bird Island, November 6, Mr. George Larson, St. Paul, discussed federal relief and compensation; Dr. John S. Holbrook, Mankato, perforated duodenal ulcers, and Dr. Max H. Hoffman, St. Paul, pneumonia.——Dr. Roy E. Swanson, Minneapolis, addressed the Rice County Medical Society, Northfield, November 27, on leukorrhea.——The Southwestern Minnesota Medical Society was addressed in Fulda, November 5, among others, by Drs. Harry W. Christianson and Lucius Haynes Fowler, Minneapolis, on proctology and appendicitis. ——Dr. Harold S. Diehl, Minneapolis, addressed the Monroe County Medical Society in Rochester, October 16, on "The Common Cold."——Dr. Orwood J. Campbell, Minneapolis, discussed appendicitis before the Washington County Medical Society, November 13.

MISSOURI

Dr. Overholser Honored.—The Cass County Medical Society paid tribute to Dr. Milton P. Overholser, Harrisonville, at a recent meeting, in honor of his completion of fifty years in the practice of medicine. A charter member of the county society, Dr. Overholser has served as a member of the state board of health, of the pension board of examiners and as president of the Missouri State Medical Association.

Society News.—Drs. Leonard T. Furlow and Ernest Sachs discussed "The Care of Acute Brain Injuries" before the St. Louis Medical Society, November 30; Dr. Samuel B. Grant showed moving pictures on pernicious anemia. The Coronado Hotel has set aside a room to be known as the "St. Louis Medical Society Room," where members of the society may gather after regular meetings for "social relaxation." A symposium on vascular diseases of the extremities was presented before the society, November 20, by Drs. William H. Olmsted, Isaac Y. Olch and Paul S. Lowenstein.

Reestablishment of R. O. T. C. Urged.—At a meeting of the St. Louis Medical Society, December 4, a resolution was adopted urging the reestablishment of the medical reserve officers' training corps units as soon as possible. The resolution points out that the federal economies, which necessitated the discontinuance of these units, are harmful to national defense, since about one half of the new medical reserve officer personnel is supplied by these units. The society believes that the embarrassment of procuring new medical officer personnel will increase to serious proportions after a few years. Resolutions were forwarded to the war department, the surgeon general of the U. S. Army, the congressmen from Missouri, the American Medical Association, the Missouri State Medical Association, and the directors-general of the American College of Surgeons and the American College of Physicians.

NEBRASKA

Society News.—A symposium on diabetes formed the program of a meeting at Wahoo, November 19, of the Sixth Councilor District Medical Association. Speakers were Drs. Frank M. Conlin, Esley J. Kirk, William H. Stokes and Alfred J. Brown, all of Omaha.

Western Clinical Assembly.—The Eleventh and Twelfth Councilor District Medical Societies sponsored the Western Nebraska Clinical Assembly at Sidney, November 12-13, in conjunction with the Western Nebraska Dental Society. The program included the following speakers:

Thomas P. Mullins, D.D.S., Chadron; Ira C. Brownlee, D.D.S., Denver, and Dr. Frank Lowell Dunn, Omaha, Oral Infections.
Dr. Sanford M. Withers, Denver, Practical Considerations in the Treatment of Cancer.
Dr. Thomas D. Cunningham, Denver, Allergy in General Medicine.
Dr. John R. Nilsson, Omaha, Traumatic Surgery.

NEW JERSEY

Society News.—Dr. Eldridge L. Eliason, Philadelphia, was the speaker at a meeting of the Cumberland County Medical Society, October 9, on "Surgical Emergencies of the Abdomen." ——Dr. George W. Crile, Cleveland, addressed the Atlantic County Medical Society, Atlantic City, November 9, on "The Adrenal Sympathetic System and Its Diseases." —— A symposium on maternal mortality was presented before the Camden County Medical Society, Camden, December 4, by Drs. Frank L. Kennedy, Frank M. Moore, Albert B. Davis and Gordon F. West. Dr. Hyman I. Goldstein spoke on "Liver Therapy in Anemia." —— Dr. Francis Ashley Faught, Philadelphia, addressed the Hudson County Medical Society, November 7, on "Medical Practice Under State Medicine in the United States."——Dr. George M. Levitas, Westwood, addressed the Bergen County Medical Society, Hackensack, December 11, on "Important Biological Factors in Fertility and Sterility." ——Drs. Frederic Maurice McPhedran and Eugene M. Landis, Philadelphia, addressed the Burlington County Medical Society, Mount Holly, recently, on "Childhood Tuberculosis" and "Practical Application of Recent Experimental Work on the Circulation and Blood Vessels," respectively.

NEW YORK

Accident Death Rate.—New York's death rate for accidents in 1933 was 68.1 per hundred thousand, the lowest except for one year since 1907, the first year in which statistics of accidental deaths were tabulated. Mortality from automobile accidents held first place, followed in order by drowning, burns, poisonous gases and railroad accidents. Of the 4,671 deaths upstate for which the type of accident was known, 37.9 per cent were motor vehicle accidents, 33.8 per cent home accidents, 18.9 per cent public (exclusive of motor vehicle) and 9.6 per cent industrial (exclusive of motor vehicle).

Institute on Conservation of Vision.—Dr. Harry S. Gradle, Chicago, delivered an address on prevention of blindness, November 6, before a joint meeting of the Onondaga County Medical Society and the Syracuse Eye, Ear, Nose and Throat Club, held in conjunction with an eye institute arranged by the state commission for the blind. The institute, which continued through November 6 and 7, was the third of its kind in the state held for the purpose of increasing the knowledge of lay workers, public health and school nurses, teachers and social workers of eye conditions and to give them an understanding of their significance. The program included papers on anatomy of the eye, nutrition in relation to the eye, errors of refraction, the art of illumination, education of the visually handicapped, and adequate care and follow up of eye cases. Dr. William F. Snow, New York, director of the American Social Hygiene Association, summarized the program at the end.

Plan to Reduce Mortality Rate.—A committee of the Medical Society of the County of Erie, appointed in April 1934 to investigate maternal mortality rates and institute measures to reduce them, made a report at a meeting of the society, November 19. In view of various detailed investigations that have been made, the committee decided not to make a local survey but to put into effect recommendations growing out of other surveys with such local modifications as may be necessary. It is planned to appoint within a few weeks a committee on obstetrics with an associate group made up of representatives of the Buffalo Health Department, Buffalo Academy of Medicine, University of Buffalo, Buffalo Council of Social Agencies, Child Welfare Committee, Visiting Nurse Association, Junior Chamber of Commerce and Buffalo Foundation. Plans for action will include the following features: education of the public, improvement of medical obstetric practice, improvement of hospital standards, the amending of the birth certificate to include information on type of delivery, and supervision of midwives.

Society News.—Dr. Richard Kovacs, New York, addressed the Sullivan County Medical Society, Monticello, December 12, on physical therapy in gynecology.——Dr. Joseph Earle Moore, Baltimore, addressed the Niagara County Medical Society, Lockport, November 16, on "The Wassermann-Fast Patient." ——Drs. William P. Healy and George T. Pack, New York, addressed the annual meeting of the New York State Committee of the American Society for the Control of Cancer at Rochester, December 11, on "Diagnosis and Treatment of Uterine Cancer" and "Recognition and Curability of Gastric Cancer," respectively.——Dr. Louis W. Sauer, Evanston, Ill., addressed the Buffalo Academy of Medicine, December 12, on "Whooping Cough—Early Diagnosis, Prevention and Treatment."——Dr. W. Russell MacAusland, Boston, will give an address, January 8, in Buffalo before a combined meeting of the Medical Society of the County of Erie, the Buffalo Academy of Medicine and the Eighth District Medical and Dental Societies, Buffalo Dental Association, on "The Importance of the Oral Cavity in General Health and the Far Reaching Consequences of Abnormal Mouth Conditions."

New York City

Health Demonstration Turned Over to City.—The Bellevue-Yorkville Health Demonstration, established ten years ago as a model for neighborhood health work, was turned over to the department of health, November 15. It will be maintained as a district health station, Commissioner Rice said.

Gifts to Columbia.—The following gifts for medical purposes were recently announced by Columbia University:

Udo M. Reinach, to establish the bulletin of the Neurological Institute Fund, $2,500.
Columbia University Club, for scholarships, $2,000.
National Tuberculosis Association, for research in tuberculosis, $1,020.
The late Dr. Cornelius G. Coakley, for research in otology, $1,000.
National Oil Products Company, $500 for research in food chemistry directed by Henry C. Sherman, Ph.D., and $300 for research in chemical pathology.
Eli Lilly and Company, for chemical pathology research fund, $600.

Course in Forensic Medicine.—A new course in forensic medicine designed primarily for physicians now holding positions as coroners' physicians or for those who wish to prepare themselves for such work is announced by New York University and Bellevue Hospital Medical College, to begin early in 1935. Formal instruction, occupying the morning hours during two semesters of five months each, will include conferences and work in the pathologic and toxicologic laboratories of the chief medical examiner of the city. The course will be supervised by Dr. Charles Norris with the assistance of Alexander O. Gettler, Ph.D., and Drs. Douglas Symmers, Harrison S. Martland, Armin V. St. George, Thomas A. Gonzales, Benjamin M. Vance, Milton Helpern and Kurt Landé. A long course in forensic medicine, inaugurated this year, covers a period of from three to five years.

Health and Hospital Budgets Reduced.—When the board of aldermen adopted the city budget for 1935 at a meeting, December 3, the estimates submitted by the health department and the hospital department were seriously reduced, the New York *Times* reported. Eight new persons were requested for the staff of the health department, most of them to be full time directors of the several services. Several other positions were eliminated. The department of hospitals also requested salary increases in order to provide full time pathologists and roentgenologists for the city hospitals. The New York Academy of Medicine and the United Hospital Fund held special meetings protesting against the cuts made by the aldermen. The academy pointed out in a resolution that the health department budget had already been reduced to a minimum and asserted that the work would be crippled to a degree out of proportion to the economy achieved. The resolutions urged the mayor to veto the budget as submitted.

NORTH CAROLINA

Society News.—Among speakers at a meeting of the Fifth District Medical Society, Sanatorium, October 18, were Drs. Jabez H. Williams, Sanatorium, on "Surgery in the Treatment of Tuberculosis"; Joseph Rush Shull, Charlotte, "Roentgen-Ray Treatment of Hodgkin's Disease," and Hamilton W. McKay, Charlotte, "Relief of Retention of Urine."——Dr. George E. Pfahler, Philadelphia, addressed a meeting of the North Carolina Radiological Society with the Forsyth County Medical Society, October 20, on epithelioma of the skin, and Dr. Clayton W. Eley, Norfolk, Va., demonstrated ventriculograms.——Dr. George R. Livermore, Memphis, Tenn., was guest speaker at the annual meeting of the North Carolina Urological Association at Winston-Salem, October 24, on "Stone in the Kidney."——Speakers at the regular meeting of the Catawba Valley Medical Society, Lincolnton, November 14, were Drs. Lester A. Crowell Jr., Lincolnton, on "Pneumothorax in the Treatment of Lobar Pneumonia"; Edith A. Goodwin, Morganton, "Treatment of Pneumonia in the Home," and Alfred A. Kent Jr., Granite Falls, "Pneumonia in Childhood."——Dr. Frank Howard Richardson, Brooklyn, addressed the Buncombe County Medical Society, Asheville, November 5, on "Emotional Developments in Children: Some Mechanisms." Dr. Charles Hartwell Cocke, Asheville, addressed the society, October 1, on "Leukopenia in Tuberculosis."——Dr. Isaac H. Manning, Chapel Hill, addressed the Mecklenburg County Medical Society, Charlotte, October 2, on hospital insurance.

OHIO

Hospital News.—A new tuberculosis hospital which is shortly to be built in Lucas County is to be named for William W. Roche, for many years a political reporter on the Toledo *News-Bee*, it was announced after Mr. Roche's recent death. Mr. Roche is credited with having instigated a reorganization of the county hospital about twenty years ago. The hospital is to be built as a FERA project.

Society News.—Dr. Leonard G. Rowntree, Philadelphia, addressed the Academy of Medicine of Cleveland, December 21, on "Therapeutic Application of Newer Developments in Endocrinology."——Dr. Irvin Abell, Louisville, Ky., was guest speaker at a meeting of the Cincinnati Academy of Medicine, December 3, on "Diverticulitis and Diverticulosis of the Gastro-Intestinal Tract." The academy joined the Cincinnati Dental Society in a meeting, December 7, at which the speaker was Dr. Robert H. Ivy, Philadelphia, on "Care of Injuries to the Face and Jaws."——Dr. Lloyd B. Johnston addressed the Cincinnati Obstetrical Society, December 13, on "Late Surgical Treatment of Uterine Inversion."——Dr. Abram L. Van Horn, chief of the division of child hygiene, state department of health, Columbus, addressed the Logan County Medical Society, Bellefontaine, December 7, on "Present Problems of Infant Health."——Dr. Ora O. Fordyce, superintendent of the Toledo State Hospital, addressed the Toledo Academy of Medicine, December 7, on mental disease; members of the staff presented a general clinic.

OKLAHOMA

Personal.—Dr. David W. Griffin, superintendent of the Central Oklahoma State Hospital, Norman, was honored at a reception given by the hospital staff and other friends, recently, in celebration of his completion of thirty-five years at the head of the institution.——Dr. John L. Day, Norman, has been appointed superintendent of the State Hospital, Supply, to succeed the late Dr. James W. McClendon.

PENNSYLVANIA

Illegal Practitioner Fined.—Charles Hayssen, Mobile, Ala., was recently found guilty of practicing medicine illegally and sentenced to pay a fine of $100 and the costs of prosecution and to spend thirty days in the Dauphin County prison.

Philadelphia

Society News.—Drs. Francis G. Harrison and Alexander Randall addressed the Philadelphia Urological Society, December 17, on "Carcinoma of the Sigmoid with Rupture into the Bladder" and "Surgery of the Upper Ureter," respectively.

Hospital News.—The fourth public health talk at Mount Sinai Hospital was given by Dr. Eugene Rush, December 26, on "How to Keep Your Children Healthy." The fifth will be presented by Dr. Sigmund S. Greenbaum, January 23, on "Care of the Skin and Hair."

Personal.—A portrait of Charles H. La Wall, Phar.D., dean of the Philadelphia College of Pharmacy and Science, was presented to the college, December 5, by the artist, Leon A. Spielman, a graduate of the school and a practicing pharmacist.——Dr. Basil R. Beltran has recently received the Palme-Académie decoration of the Ministry of National Education of France for services rendered to the French during the World War and to the French in Philadelphia.

SOUTH CAROLINA

University News.—Dr. Frank A. Hoshall, Baltimore, has been appointed assistant professor of orthopedics at the Medical College of South Carolina, Charleston.

Society News.—Dr. Lawrence P. Thackston, Orangeburg, was elected president of the South Carolina Urological Association at the annual meeting in Columbia, October 9. Dr. Montague L. Boyd, Atlanta, was the guest speaker at the meeting.——Drs. Thomas R. Gaines, Anderson, and William A. Strickland, Westminster, addressed the Oconee County Medical Society, October 18, on indications for the removal of tonsils and the technic and management of the operation, respectively.——Dr. Montague L. Boyd, Atlanta, addressed the Columbia Medical Society, Columbia, October 8, on "Malignancies of the Urinary Tract." Dr. Joseph Akerman, Augusta, Ga., addressed the society, September 10, on "Obstetric Superstitions and Traditions."——J. Nelson Frierson, LL.D., Columbia, was reelected president of the South Carolina Tuberculosis Association, which met in Columbia, November 1.

TENNESSEE

Society News.—Dr. Willis F. Manges, Philadelphia, addressed the Nashville Academy of Medicine, November 20, on "The Relation Between Sinus and Lung Infections and Between Sinus and Mastoid Infections."——Drs. Edgar Jones and Clarence S. Thomas, Nashville, addressed the medical society of Benton, Carroll, Henry and Weakley counties in McKenzie, November 15, on diseases of the white blood cells and headaches, respectively.——Drs. Phillip H. Levinson and Jesse B. Swafford were the speakers at a meeting of the Hamilton County Medical Society, Chattanooga, November 22, on "Urinary Urobilinogen: the Value of Routine Estimation" and "Normal and Abnormal Behavior," respectively.——Dr. Tom R. Barry discussed "Urology and the General Practitioner" at a meeting of the Knox County Medical Society,

Knoxville, October 30.——Dr. Sam B. McFarland, Lebanon, addressed the Wilson County Medical Society, December 6, on gastric ulcer.——Speakers at a meeting of the Washington County Medical Society, November 1, Johnson City, were Drs. Emmett E. Byrd, on the physician and his profession; Marvin H. Sandorf, gastric analysis, and Raymond D. Tompkins, heart failure.——Physicians of Dickson, Hickman and Humphreys counties recently reorganized the Tri-County Medical Society, with Dr. William J. Sugg, Dickson, as president, and Dr. Harold E. Paty, Lyles, secretary.——Drs. Cobb Pilcher, Tinsley R. Harrison and John B. Youmans, Nashville, addressed the Montgomery County Medical Society, Clarksville, October 19, on edema.

VIRGINIA

Personal.—Dr. John C. Neale Jr., Hilton Village, has been appointed health officer of Henrico County, succeeding Dr. Ernest L. Stebbins, who recently went to the New York state department of health.

New District Health Office.—The state health department has established a new district office in Abingdon with jurisdiction over thirteen counties. Dr. Edgar C. Harper, Richmond, who was formerly associated with the department in various capacities, will be in charge of the new area beginning January 1.

Society News.—The Southwestern Virginia Medical Society held its semiannual meeting in Radford, recently; among other speakers, Dr. Edmund M. Chitwood, Wytheville, delivered his presidential address on "Infections of the Blood Stream."——Drs. Ernest G. Scott and Hunter B. Spencer were the speakers at a meeting of the Lynchburg Academy of Medicine, October 1; their subjects were "Von Gierke's Disease" and "Roentgen Therapy," respectively.——Dr. Frank B. Stafford, Charlottesville, addressed the Medical Association of the Valley of Virginia, Staunton, recently, on "Upper Respiratory Infections Simulating Tuberculosis."

WASHINGTON

Society News.—Drs. Charles B. Ward and Allison T. Wanamaker, Seattle, addressed the Chelan County Medical Society, Wenatchee, October 17, on "Treatment of Malignancy" and "Relation of Biochemistry to Nose and Throat," respectively.——Speakers at a meeting of the King County Medical Society, Seattle, December 3, were Drs. Torleif Torland and Edwin A. Nixon, Seattle, on "Vaginal Hysterectomy by the Clamp Method" and "Observations on the Treatment of Varicose Veins," respectively. At the meeting November 19, speakers were Drs. Lester J. Palmer, on "Care of the Surgical Diabetic Patient"; David C. Hall, "University Health Service and State Medicine," and Inslee B. Greene, "Medicine at the Crossroads."

PHILIPPINE ISLANDS

Society News.—Drs. Andreas Trepp and Sixto A. Francisco addressed the Laguna Medical Society in San Pablo, September 23, on treatment and prevention of tuberculosis.——The Tayabas Medical Association, a newly organized society, held its first meeting in Lucena, September 3, with Dr. Pedro N. Villasenor as the speaker, on management of dysentery.

Health Commissioner Appointed—Dr. Jose Fabella has been appointed commissioner of health and welfare of the Philippine Islands. Dr. Fabella is 46 years old and a graduate of Rush Medical College, Chicago, class of 1912. Dr. Fabella and Dr. Jose P. Bantug, of the staff of the bureau of health, were guests of honor at a meeting of the Bulacan Medical Society in Manila, September 8. A reception and dance were given at the Cosmos Club, Manila, October 6, in honor of Dr. Fabella by the Philippine Islands Medical Association, the Colegio Medico-Farmaceutica and the Philippine Federation of Private Medical Practitioners.

GENERAL

Bequests and Donations.—The following bequests and donations have recently been announced:

Mount Sinai Hospital, New York, $25,000 by the will of the late Mrs. Isabella Kritzman; $1,000 from the late Sydney Ballin.

National Jewish Hospital, Denver, $4,175 by the will of the late Alexander M. Blumenstiel.

Washington Home for Incurables, Washington, D. C., $5,000, to establish a cancer ward by the will of the late Mrs. Eleanor Foster Lansing.

Automobile Fatalities in Four Weeks.—The bureau of the census, U. S. Department of Commerce, announces that eighty-six large cities in the United States reported 865 deaths from automobile accidents during the four weeks ended November 24, as compared with 734 for the four weeks ended Nov. 25, 1933. Of the total number 665 occurred within city limits. For the fifty-two week periods ended Nov. 24, 1934, and Nov. 25, 1933, the totals for all cities were 8,822 and 8,077, respectively, which indicate a recent rate of 23.6 per hundred thousand as against an earlier rate of 21.4.

Changes in Status of Licensure.—The Michigan State Board of Registration in Medicine reports the following action:

Dr. Joseph Henry Hanson, Detroit, license restored, recently, for one year of probation. At expiration of this year, final action for complete restoration or revocation will be taken.

Dr. William Kelley, license revoked, recently, for conviction and federal sentence for violation of the Harrison Narcotic Act.

The North Carolina Board of Medical Examiners reports the following:

License of Dr. Thomas Art Smith, Charlotte, restored at its June meeting.

The Oregon Board of Medical Examiners makes the following statement:

License of Dr. George Ernest Darrow, Los Angeles, to practice in Oregon revoked for moral turpitude.

The New York State Board of Medical Examiners reports the following:

License of Dr. Burdette Martin Christianson, New York, restored in September after six months' suspension.

Government Services

Changes in Public Health Service

Surg. Paul D. Mossman, relieved at Ellis Island, N. Y., and assigned to duty at Naples, Italy, in the office of the American consul.

Passed Asst. Surg. Ralph B. Snavely, relieved at Stapleton, N. Y., and assigned at the National Institute of Health, Washington, D. C.

Surg. Mark V. Ziegler, relieved at Raleigh, N. C., and assigned at Washington, D. C.

Passed Asst. Surg. Edwin G. Williams, relieved at Naples and assigned at Ellis Island.

Acting Asst. Surg. Austin H. Smith, relieved at Fort Eustis, Va., and assigned at the U. S. Penitentiary, McNeil Island, Steilacoom, Wash.

Asst. Surg. Bert R. Boone, relieved at Seattle, Wash., and assigned at the marine hospital, Detroit.

Drs. John R. Heller and Charles S. Sample Jr., appointed and commissioned as assistant surgeons.

Drs. Joseph R. Ridlon and Randolph M. Grimm, promoted and commissioned as medical directors.

Food and Drug Seizures for November

Nearly 16,000 bushels of apples bearing poison residues exceeding the limits of safety were seized by the Food and Drug Administration of the U. S. Department of Agriculture during November after they had been shipped from New York, Michigan, Illinois, Missouri and other central states. Fifty-two shipments of cream totaling more than 3,000 gallons, and 11,676 pounds of unfit butter were confiscated and destroyed. Among other seizures were sixteen of canned shrimp, amounting to 4,000 cases; eleven of canned mackerel totaling 4,300 cases. Nineteen shipments of edible oil, 7,000 cans filled with cottonseed oil, corn oil and bean oil with little or no olive oil, were also seized; all were labeled so as to lead a purchaser to believe the products were composed largely or entirely of olive oil or were of foreign origin. In the drug field seizures included shipments of chloroform, tincture of opium and witch hazel extract. Recent prosecutions reported by the administration include: The Oelwein Chemical Company, Oelwein, Iowa, fined $200 for shipping livestock preparations bearing unwarranted claims of vitamin potency; Natural Products Company, Eugene, Ore., $900 for shipping misbranded mineral waters; Steketee's Family Medicines, Grand Rapids, Mich., $200 for shipping "patent medicines" bearing false therapeutic claims, and the Alaska Year Round Canneries Company, Seattle, Wash., $300 for shipments of canned salmon consisting partly of decomposed fish. Many other fines ranging from $1 to $200 were reported.

CORRECTION

Cultivation of the Virus of Lymphogranuloma Inguinale.—In Dr. Elmore B. Tauber's discussion in THE JOURNAL, December 15, page 1833, is the following sentence: "By using a special medium, I think I have succeeded in cultivating this virus." Dr. Tauber writes that this is incorrect and should have read as follows: "I am informing you of the cultivation of a virus, the work of Dr. Joseph Tamura." Dr. Tauber meant merely to call attention to Tamura's work, to whom all credit for this work, he says, is due.

Foreign Letters

LONDON

(From Our Regular Correspondent)

Dec. 1, 1934.

Asthma Research

The Asthma Research Council was formed in 1927 to direct research into asthma and was supported by public subscription. Under the auspices of the council, asthma clinics have been established at some of the principal hospitals. The report for the year ended last October shows that the clinic at Guy's Hospital continues to expand. During the year there were 5,575 attendances and 450 new cases. Such a large number has given a better insight into the natural history of the disease. Dr. L. J. Witts has shown that the most striking difference between the asthmatic and the normal is the high incidence of protein hypersensitivity and the frequency of lesions of the upper and lower respiratory tract. In conjunction with the experimental work of Dr. R. S. B. Pearson, these results have confirmed the value of the skin tests, which at one time were the subject of much criticism. Treatment has been directed to attacking the lesions of the respiratory tract by respiratory exercises, inhalations, vaccines and operations, while the protein hypersensitiveness has been dealt with by avoiding the harmful agents and attempts at specific and nonspecific desensitization. Though the essence of asthma still seems to escape analysis, the conviction grows that protein hypersensitiveness and respiratory damage are the stimuli that make manifest a biochemical difference between the asthmatic and the normal, which should be susceptible to simple treatment. Dr. Pearson has continued the study of skin tests to common allergens and proved the superiority of the intradermal over the scratch technic of skin testing. It has been found that positive skin reactions are not uncommon in apparently normal persons, so that no sharp distinction can be made by them between the asthmatic and the healthy. It is not hypersensitiveness that is pathologic but its persistence in exaggerated degree. Skin tests have shown that the majority of asthmatic persons are sensitive to several proteins, which they are constantly inhaling—house dust, feathers, orris root (face powder), pollens, horsehair and other animal hairs. Concentrated solutions of each have been prepared and reactors have received a course of inoculations. Good results have been obtained, especially with oily solutions and in the predominantly nasal cases. It is recommended that vasomotor rhinitis and paroxysmal rhinorrhea be treated on allergic lines, as relief is quickly obtained in the majority of cases. At St. Mary's Hospital the main treatment has been on bacteriologic lines. A special method has been used whereby the organisms to be incorporated in the vaccine are selected after the bactericidal power of the patient's blood has been tested against the various organisms isolated from the patient. Those which have stood the bactericidal action of the blood are used.

HAY FEVER

The prevention and treatment of hay fever by injection of large doses of grass pollen extract gives relief in nearly 100 per cent of cases. The results are controlled by skin tests and the result aimed at is the complete desensitization of the patient, as indicated by negative skin reactions. The amount of pollen extract required to abolish skin sensitivity and give complete relief varies and frequently necessitates the use of doses of 100,000 units of extracts.

BACTERIAL SENSITIZATION

An experimental investigation is being carried out on the significance and mechanism of the late inflammatory skin reactions to bacterial products seen in cases of bacterial hypersensitiveness. In the past, many workers have investigated sensitiveness to bacteria and their products but so far the mechanism of induced sensitization and the production of inflammatory skin reactions are by no means clear. It is thought probable that active antibacterial immunity and hypersensitiveness to bacterial products are brought about by two distinct portions of the bacterial cell. Dr. Harley has shown that the immunizing antigen of pneumococci can be obtained free from bacterial protein and other cellular substances and that this is the portion of the pneumococcus responsible for the production of immunity. It appears that sensitiveness to bacteria is not induced by the immunizing antigen but by the bacterial protein and that the animal sensitized by either the whole organism or the bacterial protein reacts to these but not to the isolated immunizing antigen; conversely, treatment of an animal with the isolated antigen produces immunity but not hypersensitiveness to the organism. It is thought that the final results of this investigation will have considerable bearing on the treatment of bacterial hypersensitiveness.

Pay for the Treatment of Road Accidents

According to the new road traffic act, in case of bodily accidents (including fatal injuries) the person using the vehicle that caused the accident must pay the physician rendering emergency treatment a fee of $3 for each patient and a mileage fee of 12 cents a mile for any distance over 2 miles. If more than one physician administers treatment, the first to do so will be entitled to make a claim. The same payments must be paid to hospitals that render these services. If the accident is due to the negligence of some party other than the vehicle user, the latter is entitled to recover from the former the amount payable to the physician or hospital. The act has also been made water tight as regards insurance companies which issue various restrictions in their policies, such as that a car must not be used for business purposes and then decline to pay under these circumstances. In future it will be the duty of the insurance company to pay for all third-party risks, and any limitations contained in a policy as to age, physical condition of the driver or other conditions will be void. This means that the insurance policy of the user of the vehicle (which is compulsory) must cover such third-party risks.

The Protection of Radium Workers

At the British Institute of Radiology, Dr. G. W. C. Kaye, director of the physics department of the National Physical Laboratory, made a communication on the protection of radium workers. The two main factors of gamma ray protection are to place the radium source as remote as is feasible and to enclose it in protective material. To double the distance from the source is equivalent to increasing the lead protection by nearly 3 cm. But in many cases there is no alternative to lead protection, and for this a transmission curve of gamma rays in lead under conditions as near as possible to those of practice has been worked out at the National Physical Laboratory and leads to the following practical conclusions: The tolerance distance for unprotected radium of 0.2 Gm. and upward is greater than the distance between adjacent beds in a ward, so that precautions should be taken if patients undergoing irradiation are in the same ward as other patients. For nurses and other attendants the tolerance distance for 0.2 Gm. of unprotected radium is about 2 meters, so that they should approach within that distance only when necessary. For quantities of 0.5 Gm. the tolerance distance is 3.5 meters. Therefore the staff should not remain in the vicinity of patients undergoing treatment with such quantities. The carrying boxes used for transport of radium of ordinary amounts are usually small and made of wood, lined with lead of 1 cm. thickness. These are suitable for occasional transport of small quantities, but if larger quantities are frequently transported larger boxes,

with centrally situated small containers and more adequately protected, should be provided, and these should be conveyed by trolley rather than by hand. As to transmission by the British parcel post, which has the limitations of 11 pounds in weight and 6 feet for length plus girth, it has been found that distance is superior to lead protection. A bulky parcel containing no lead may have only half the weight and be thrice as effective as a small packet with the maximum of lead protection. Moreover, bulky packages are more likely to be transmitted in the post by vehicle than by hand, which is an advantage. With regard to radium beam therapy, nurses and attendants should not remain for any appreciable time at distances within 1.5 meters behind the bomb, 2.5 meters from the side of it, or 4.5 meters in front of it, in the direct beam.

PARIS

(From Our Regular Correspondent)

Dec. 3, 1934.

Congress on Colon Bacillus Infections

It is the custom in France to hold meetings at the various resorts at which the springs have medicinal virtues. At these meetings the most distinguished members of the profession are invited to read papers describing their experience with diseases that the particular spring aims to relieve. Chatel-Guyon, in the center of France, is noted as a resort that specializes in the treatment of gastro-intestinal ailments. Like most of the large medicinal watering places in France, it is well organized so far as medical supervision and physical therapy are concerned.

An instructive paper read at the Congress on Colon Bacillus Infections recently at Chatel-Guyon was by Noel Fiessinger and Hutet of Paris. Attention was called to the danger of making the colon bacillus responsible for too many conditions until proof had been given of such etiology. No one can deny that infection of the urinary tract due to the colon bacillus exists, but to employ too easily the term "colibacillosis" for infections of the alimentary tract, even though they are of mild character, as well as for fevers of undetermined etiology, is not warranted by the facts. This is especially true of colon bacillus infections of the urinary tract. Here the colon bacilli, which are present normally in the lower alimentary tract, are supposed to traverse the intestinal wall and the portal and pulmonary circulations, to be finally eliminated through the kidneys. There has been no proof of this in the form of a positive blood culture. The authors of this rather frank criticism have sought in vain a colibacillemia in persons suffering from constipation. Only in two severe cases of septicemia due to the colon bacillus was the blood culture positive. The passage of the bacilli from the colon into the circulation occurs but rarely. If the organisms were in the blood, they could not escape detection by culture methods.

Colon bacillus infection of the urinary tract is quite common in women without any accompanying symptoms. One must take every precaution in securing urine for bacteriologic study, because the normal urine is constantly infected by the colon bacilli in the vulva, even after a catheterized specimen has been obtained. The only way to decide whether such a contamination has taken place is to inoculate culture mediums within an hour after the specimen is obtained. Even with these precautions, cultures were positive without any accompanying symptoms. The female urethra, on account of its relatively small size, constantly allows growth of colon bacilli. This does not occur in the male urethra. The presence of colon bacilli in the urine therefore is not synonymous with infection of the urinary tract by these organisms. The authors are opposed to the theory of Heinz-Boyer that the colon bacilli traverse the intestinal wall. The real factor that aids the development of the colon bacilli in the urinary tract is the oliguria that occurs at the beginning of menstruation. This favors the growth of the organisms in the urine. In the enterorenal syndrome it is the decreased absorption of fluid that is lacking and not an infection of the blood by the colon bacilli from the intestine. A colon bacillus septicemia is an effect and not a cause of the urinary tract infection.

The only other colon bacillus infection is that which involves the gallbladder. It is not due to an ascending infection along the common duct from the duodenum. The authors have observed a colon bacillus cholecystitis in only two fifths of their cases, never in cases presenting urinary infection with colon bacilli.

The conclusions reached by these authors are contrary to those of many French clinicians, that in the majority of cases colibacillosis is a local and not a generalized infection. The more normal the digestion of food, the more colon bacilli one finds in the stools.

In severe enterocolitis, typhoid, cholera and dysentery the number of colon bacilli in the intestine decreases in proportion to the increasing gravity of the disease. When the colon bacilli begin to grow again on culture mediums, the disease is near its end.

The elimination of obstructions in the urinary tract and large quantities of fluid will do more to eliminate colon bacillus infections than any other treatment.

Suicides of the Adolescent

An instructive survey of the causes of the increasing number of suicides of the adolescent is contained in an article of Dr. Gilbert Robin. One reads articles by psychiatrists in which the causes are given as melancolia, epilepsy or dementia praecox. This is far from explaining the majority of cases. Adolescence is the period of life in which the parents, if they wish to give any advice, should never use harsh measures in the form of commands or injunctions. There is revolt and an inevitable struggle on the part of the recipient, whose personality at this period is too strong for the world, which is opening its doors to assimilate them. The point of view of the adolescent is not that of the adult. The adolescent believe themselves to be heroes and hence there arise misunderstandings between them and adults. According to Robin, it is the contact of this intense personality, which considers that it cannot live in the adult world and seeks any means to avoid it, which plays the leading part in suicides of the adolescent. In some cases the contrary occurs. The personality is groping to find its place in organized society and it is at the end of a fruitless search. Others become too introspective, regarding themselves for hours in a mirror, in the effort to find in the physiognomy the reflection of the movements of the soul. They overlook the real appearance to come into contact with an unreal personality. Among the adolescent there are those who commit suicide because of an exaggerated sense of honor, which they flatter themselves that they possess, often to merit, post mortem, the appreciation which they considered that they were entitled to during life. They believe that in committing suicide they are inflicting punishment on those who failed to appreciate their merits during life.

Other causes are found in two extremes of society, those who have been raised in poverty and have never seen the brighter side of life, and, at the other end of the scale, those who have had parents too rich or too cowardly to refuse anything, wherefore every thrill has been exhausted and there is only ennui left.

Experimental Production of Actinomycosis

In the *Annales de l'Institut Pasteur* for September, Grooten reports the results of successful experiments made to determine whether human actinomycosis is transmissible to rabbits. The organisms were isolated from two cases of the disease in

the human jaw and one in the neck. The cultures incorporated in Veillon gelatin were injected into the peritoneal cavity of rabbits. The gelatin seems to protect the organisms from attack by the polymorphonuclear leukocytes sufficiently long to combat phagocytosis. It requires several months for the typical yellow granules to develop.

Antistreptococcus Serum of Vincent in Obstetrics

The subject chosen for his graduation thesis by Brinon-Cherbuliez was the antistreptococcus serum of Vincent in obstetrics. The work reported was based on twenty-seven cases observed in the Maternity Department of the Boucicaut Hospital. The serum has been employed in cases of septicemias with positive blood cultures as well as in septicopyemias and other prolonged postpartum infections. If given in sufficiently large doses and over a long enough period, as emphasized by Vincent, the results will be gratifying. The only failures were in cases due to other organisms than the streptococcus.

As a prophylactic measure, the serum ought to be given in all cases of hemorrhage due to placenta praevia or other uterine lesions, as well as in those in which there are retained cotyledons or membranes, in amniotic infections, in endometritis, in acute sore throat, in influenza, in intra-uterine intervention or in artificial delivery. In these cases, 20 cc. should be given daily for three days.

The percentage of postpartum infections following intra-uterine operations during delivery has fallen from 30 to 15 as a result of the prophylactic use of the Vincent serum.

Immunity of Cubans to Yellow Fever

At the November 6 meeting of the Academy of Medicine, A. Recio presented an interesting paper based on the examination of the blood of Cuban natives (black and white) born before or after the last epidemic of yellow fever; i. e., since the last case was reported in 1908. Of sixteen individuals born prior to 1901, the date of the last severe and generalized epidemic, twelve, or 75 per cent, were found to be immune. Of eleven persons born between 1902 and 1908, during which interval there were small localized epidemics, none were found to be immune. The same was true of fourteen others, born since 1908, since which date no case has been reported.

In the discussion, Dominguez emphasized the importance of Recio's study. Up to the present time the native Cuban has always been regarded as immune to yellow fever. If another epidemic occurred, the majority of the Cubans would be just as susceptible as those not born there.

BERLIN

(From Our Regular Correspondent)

Oct. 29, 1934.

Congress of German Ophthalmologists

At the recent fiftieth Congress of German Ophthalmologists, Best spoke on hereditary glioma of the retina, which sometimes may be dominant, other times recessive. The importance of heredity must not be overemphasized, since most children having glioma die before the age of puberty and, above all, since 85 per cent of cases are unilateral, despite the influence of heredity, which is essentially the same in the eyes of twins. Others found that, of forty-eight cases of glioma, twenty-seven showed no hereditary factors or influence from familial intermarriage. The occasional familial event of a phenotypic healthy married couple whose children all suffer from glioma certainly points to hereditary influences. In such cases the glioma is mostly bilateral. The lack of heredity in sporadic cases as well as the frequency of it in familial cases may be explained by mutation. Families presenting glioma are otherwise hereditarily healthy, so that a combination with any other gene is not to be taken into consideration. According to Best, the mendelian laws do not definitely apply to gliomas and to other severe ocular deformities. Sterilization should be done in clear sporadic cases.

Serr reported on autohemic injections into the anterior chamber in tuberculous iritis according to Schieck. He found a rapid improvement of clinical symptoms in thirty-two eyes and in five after continued treatment. Permanent results were generally satisfactory. Treatment was unsuccessful in ten eyes, and one patient showed definite deterioration.

Marchesani read a paper on juvenile recurring vitreous hemorrhages, which have heretofore been interpreted as probably of tuberculous origin, in that tuberculosis of the venous walls was assumed. In a number of such cases the author observed signs of thrombo-angiitis obliterans. The anatomic differentiation of a tuberculosis of the veins from other types of vascular changes cannot be definitely made, for giant cells may appear on the vascular walls without tuberculosis.

Schieck spoke about the changes in the vortex veins and vessels of the choroid in glaucoma. The latter are especially widened at the point where they enter the veins, while the lumen of the vortex veins was almost obliterated. A pathologic condition of the wall was no more in evidence than an obstruction of the beginning part of the vessel through the sinus wall; rather, the pressure on the sclera had merely forced the obliquely transpassing veins together.

Several papers treated of operative methods for detachment of the retina. Special attention was given to electro-endothermy. Meesmann of the Berlin Charité Augenklinik improved the method by developing electrodes, which allow an exact measure of the heat produced in the various tissues of the eye, so that mistakes in dosage, caused by the different electrical conductivity of various tissues, can be excluded. The temperature is most effective in an exceedingly low degree; namely, between 158 to 167 F. Heat greater than this may bring about severe injuries, such as intra-ocular hemorrhages, with bad prognosis. Underdosage can be easily avoided.

Mylius maintains that not enough attention has been given to diseases of the eye in renal diseases. Yet there are hardly any symptoms to be found. Eleven cases of benign sclerosis were anatomically without any special symptoms. In twenty-one cases of renal diseases, severe changes in the blood vessels of the ciliary body may be recognized. The following symptoms are worthy of mention: proliferations of the intima from the mildest to the most advanced degree with obliteration of the vascular lumen in addition to simple hyaline and sclerotic degeneration of the vessels, severe hypertrophy of the muscularis, especially swelling, lipoid infiltration and disintegration of the wall. Von Hippel was concerned with the subject of bacillemia in diseases of the eye. The results of his tissue cultures which are of great diagnostic value in these cases were:

Of 46 cases of iritis, 12 positive.

Of 1 case of sympathetic ophthalmia, 1 negative.

Of 21 cases of perivasculitis of the retina, all negative.

Of 19 cases of retrobulbar neuritis, 6 positive.

Of 27 cases of other diseases, including scleritis, interstitial and phlyctenular keratitis and choroiditis, 6 positive.

Of 11 cases of perforated injuries, 3 positive.

With respect to the successful treatment of sympathetic ophthalmia, von Szily performed grafting experiments on chickens and monkeys as well as further transplantation from animal to animal. He obtained new specific results, among which round cell clusters predominated to the point of building real lymph follicles. The supposedly specific virus is ineffective on the cornea as compared with herpes virus; it does not spread diffusely through the central nervous system and does not produce encephalitis or any otherwise general symptoms. There are many differences of opinion regarding the histology of sympathetic ophthalmia in human beings. A specific pathologic agent probably lies at the bottom of this disease.

Incidence of Cripples

A census taken for all of Germany in 1906 showed that 1.48 per cent of every 1,000 inhabitants are crippled children. The difficulty of accepting such statistics begins in definitions. According to Dr. Landwehr of the Municipal Health Department of Cologne, cripples are persons "who as a result of abnormalities of the motor apparatus are so permanently injured in using it that their ability to compete in the working market and earn a living is diminished."

The national census of cripples for 1925-1926 gives as the total number of cripples around sixty to every 10,000 inhabitants (without including those injured in the war); of these almost two thirds are classed as severely crippled. The severely injured are defined as "persons whose normal motor ability has been permanently impaired or whose body form deviates strongly from the norm." It is difficult to determine the amount of orthopedic defects in the population and it is almost impossible to evaluate them, especially because in cripples the interrelation of the factors producing the irregularity are more varied than in any other field of social biology. In 1932 and 1933 Dr. Landwehr classified 2,500 cases of the Public Welfare Office in Cologne. These statistics comprise only children and young people up to 25 years of age, including weak minded and mentally unbalanced patients. Of these cases, 16 per cent were minor impairments (syndactylia, slight foot or spinal deformities), 40.2 per cent of the patients were crippled (that is, with recent bone tuberculosis, severe curvature of the spine, deformities of the large joints, loss of a limb, and some were in need of institutional care); 43.8 per cent were still under observation. From the sociological point of view, 18.3 per cent of 2,500 people under welfare station care are classified as severely crippled; of these, 10.3 per cent are unable to walk; 20.7 per cent evinced a high degree of kyphosis; this group includes patients presenting internal injuries and fistulas, and dwarfs; 14.7 per cent showed arm impairments such as stiffening of the large arm joints in an unfavorable position, complete paralysis of these joints and severely mutilated hands; 16.4 per cent are one handed and have arm and hand paralyses that are attributable to the loss of the hand; 37.9 per cent show such leg abnormalities as unsteady, dragging walk, and congenital and spasmodic paralyses; this also includes persons with bulky prostheses. At this point it should be mentioned that body injuries, as the loss of an arm dating from birth, so seldom offer physical difficulties to the persons afflicted that many of them are capable of normal business occupations. The number of congenital cripples varies. In a census taken in one of Berlin's larger districts, for example, the total number of cripples amounted to 5.5 per cent, whereas the national census of crippled children and adults up to 20 years of age is 32.9 per cent and in the advanced age groups 16.6 per cent. Therein lies the great tendency to assume in young cripples the presence of a birth injury, although it may not have been proved. Closer analysis might reveal that 16 per cent of "congenital defects" more closely approaches the true situation and is perhaps the minimal estimate.

Campaigning for Deliveries at Home

A decree of the Prussian minister of the interior concerning the problem of deliveries at home and deliveries in special institutions is an interesting contribution to the new racial policy in Germany. Numerous and various organizations together with wide sections of the population interested in increasing the birth rate have recently taken great pains to prevent deliveries in obstetric homes or clinical institutions as far as possible in order to reduce the death rate of mother and child. This conviction is based on the idea that the fundamental transference of all births to lying-in institutions is a necessary measure. According to the minister of the interior this point of view does not agree with present-day experiences in medicine. Clinical delivery is naturally to be recommended in every case in which complications are expected or in which living conditions are especially unfavorable. On the other hand, recent scientific investigations and experiences have revealed that the chances for a favorable and normal course of delivery are no less in one's own home than in a clinical institution. The only disadvantage attendant on a delivery at home is that when an emergency operation is needed it may be too late to call a doctor or too late to transfer the patient to a hospital. But there are advantages worth mentioning, such as the uninterrupted care by the same midwife, the gradual transition from puerperal bed to house work, and the valuable experience of learning how to relax. The transition from clinical care to house work is often marked by unfavorable effects. The danger of puerperal fever or other infectious diseases is generally no greater for the mother in a delivery at home than in an institution. Furthermore, confinement at home makes the members of the family feel closer to one another, which agrees with the National Socialist program of life, whereas the attempt to transfer all confinement cases to institutions would in many ways produce a sense of familial estrangement. Finally, the support of medically unimportant institutions is a double burden to the community in that it is necessary to tax public funds to keep them up and that it imposes on the time and services of all available competent physicians, midwives and nurses. After all, the establishing of any non-self-supporting lying-in homes should in any case be opposed and the demands made by such established homes should be carefully examined from this point of view. The tendency to transfer puerperal patients to institutions should be discouraged unless on expert advice.

Campaign Against Tuberculosis

The tuberculosis societies of Germany united in a congress for the promotion of health, held during September at Salzuflen, a German spa. Among others, Dr. F. Kreuser of Stuttgart read a paper on tuberculosis as a vocational disease. With respect to the incidence, it may be said that there are only a small number of cases presenting occupational infection. However, active tuberculosis infection must be guarded against in the future by having applicants for work submit to a thorough physical and roentgen examination. Likewise, roentgenograms should be made of the personnel during and after periods of exposure to infection. In addition to instructing the attending personnel, attention should be focused on procuring healthy working conditions in every locality. For those afflicted with disease and those who have become rehabilitated, a work adjustment board should be established, which would not permit completely healthy people to work side by side with their sick co-workers.

The connection between women workers and tuberculosis was discussed by Dr. A. Hofbauer of Erfurt. The unfavorable effect of industrial work on tuberculosis in women is generally caused by burdensome work. Especially deleterious effects are produced in women who have a double task to perform; namely, the duties of mother and housewife as well as those of daily wage earner. Women should be eliminated, especially from dusty occupations. An increase in tuberculosis of women would result in racial deterioration.

H. Krusch of Gotha commented on the conducting of medical examinations in the tuberculosis public welfare stations. The state of Thuringia is an example of what a well conducted public welfare office can do. Each principal attending physician in 1932 had on an average of 5,000 roentgenoscopies (388.8 to every 10,000 inhabitants) and about 4,500 physical examinations (386.7 to every 10,000 inhabitants), sometimes even more. Dr. Krusch believes that it is necessary to follow up all those in the neighborhood of cases of open tuberculosis by thorough roentgen examination. The understanding of the "neighbor-

hood" should be further widened so that the neighborhood of recently appearing closed tuberculous patients should be investigated. Immediate examination of all colaborers is important; the greatest danger of infection in conditions of bodily strain lies in the close contact between workers. One will always find fewer cases of open tuberculosis in the environmental than in the serial examinations. Here lies the importance of the environmental examination, which the smaller dispensaries are in a position to conduct, while the making of serial roentgen examinations requires an elaborate technical and medical set up.

A decree of the Prussian Ministry of Science, Art and Popular Education concerns the protection of school children against any danger to their health from tuberculous teachers. The reports of official physicians required with the application for entrance into the normal school during the course of study there and on assuming regular employment must be accompanied by a roentgen examination of the lungs. The minister adds that experience has proved that these conscientious evaluations of roentgenologic examinations afford an effective protection against tuberculosis in school children. The demand for roentgenograms is also conducted in an economical fashion, so that the costs of paper films come to only 0.40 R. M. Despite the careful observation and elimination of applicants for teaching positions, special attention must be applied to the danger of tuberculous diseases in all classes. It should be the duty of the school board to demand a facsimile of a certificate of health from an official physician or even from a specialist in cases suspected of tuberculous infection or of tuberculous invasion; as soon as the disease manifests itself, proper measures should be instituted.

Infection Due to Bang's Bacillus

From Oct. 1, 1932, to Sept. 30, 1933, 483 cases of infection due to Bang's bacillus were reported in Germany. Of these, 350 were in men, 131 in women, and 2 undetermined. Diagnosis was made on the basis of serologic examinations of the patients. During the three years previous the number of cases reported were as follows: 1929-1930, 626; 1930-1931, 520; 1931-1932, 498. Most cases occurred in middle aged patients. No cases of infection from Bang's bacillus in connection with abortion were observed. Those reported were always individual diseases; transmission of infection from person to person was not observed in one instance. Of four deaths observed, only one was directly attributable to the Bang bacillus infection.

BELGIUM

(From Our Regular Correspondent)

Oct. 11, 1934.

Radio Medical Consultations on the High Seas

As a consequence of the initiative of Dr. Bernard, mentioned in a former letter, the service of radio medical consultations on the high seas has been developed considerably. The journal *Wandelaar*, published under the auspices of the navy, reports that since 1927 twenty-three nations have given their adherence and as a result ninety-three coastal stations have been equipped. The complete list is given in the fourth edition of the Nomenclature of Berne (international telegraphic bureau), which has just appeared. Besides Belgium (one station, Ostende-Radio), France (six stations), Germany (two stations), England (ten stations), Holland (one station), Norway (three stations), Sweden (five stations), Ireland (two stations) and Denmark (two stations), one finds also Australia (fourteen stations), Colombia (one station), Costa Rica (one station), the United States (twenty-five stations), Fiji Islands (four stations), Guatemala (one station), Honduras (three stations), Marianne Islands (one station), Marshall Islands (one station), Nicaragua (three stations), New Guinea (one station), Panama (two stations), territory of Papua (one station), Samoan Islands (one station), Faeroe Islands (one station) and Greenland (one station). The Pacific has been especially equipped, while the South Atlantic has not yet been equipped but is supplied by the continuous increase of short wave stations. As to the English Channel and the North Sea, the vessels have at their disposal the stations of Boulogne-sur-Mer, Ostende, Scheveningen and North Foreland; the largest part of the radiomedical traffic is handled by the latter station. The English service is distinguished by the fact that a vessel may request a maritime sanitary office from the shore on the condition that it comes to anchor at three miles from the coast (5½ kilometers).

Pulmonary Anthracosis

Dr. Courtois brings an important contribution to the question of anthracosis-silicosis-tuberculosis. Being the physician of a sanatorium, of an antituberculosis dispensary, and of a consultation clinic of the respiratory passages, situated in the middle of a mining region, the author had occasion to study the history of 136 miners suffering from pulmonary disorders. He describes the symptoms of the disease and then presents a number of cases of miners suffering from pulmonary diseases, with reproductions of the roentgenograms of the thorax. Among the 136 patients, twelve present disorders of no medical interest, thirty-three present so-called negative roentgenograms belonging to the "anteprimary" stage of the disease; ninety-one present so-called positive roentgenograms, of which thirty offer nodular opacities (primary stage), and sixty-one confluent opacities (secondary stage).

Courtois presents pathologic microscopic and macroscopic documents of great value and shows what he calls "the film of anthracosis." Anthracosis presents an anteprimary stage characterized by a slow and progressive invasion of the lungs by coal dust mixed with siliceous and other elements; the primary stage, besides roentgenologic signs, manifests itself by cardiopulmonary disturbances, and in the secondary stage the fibrosis, nodular in the beginning, becomes confluent. The second period is the time of the infectious complications, especially tuberculosis. In his statistics Courtois finds that more than one fourth, even two fifths, of the patients suffer from tuberculosis, and it is here that the conclusions of the author are unexpected and interesting because they do not agree with the ideas generally held on the subject of tuberculosis among miners.

Twenty-Sixth Congress of the Belgian Medical Federation

The twenty-sixth Congress of the Belgian Medical Federation has been held this year under the presidency of Dr. Mattelet and studied some interesting questions.

If a physician makes a discovery has he the right to reserve for himself the monopoly of it? The president, Dr. Mattelet, discussed this question following an inquiry instituted by the International Professional Association of Physicians. A study has been made through the intervention of the League of Nations, in order to elaborate a new international convention protecting the patent of invention and the scientific property. It is necessary that the medical profession make known its point of view so that it may be taken into account for any convention that might eventually be signed. The reporter thinks that in principle the medical patent can only harm the reputation of the medical profession, which in any case should keep intact its traditional virtues. Consequently, the physician should not take a patent for any discovery that may render service to humanity. It follows that an international action should be taken for the abolition of any patent of medical nature taken by a physician or a nonphysician. If under certain conditions and for certain uses it should be decided that a patent should be taken, it is desirable that such patents be dedicated, in other words, exploited by a governmental or scientific organization (the Order of Physicians, Academy, and so on), especially

the public interest being taken into account. The proceeds should for the largest part go to a foundation for scientific research and some part could be used to reward the author of the discovery proportionately to its importance and utility.

ROME

(From Our Regular Correspondent)

Oct. 22, 1934.

Functions of Subcutaneous Tissue

Dr. Casazza of Pavia recently reported to the Società Medico-chirurgica of Pavia on his investigation of the function of absorption of the subcutaneous tissue, especially from a dermatologic point of view. While some authors have investigated the function of absorption of the subcutaneous tissue in cardiac defects and in renal diseases to ascertain the influence of the latter on the former as a repercussion, the speaker's work is an attempt to verify the local phenomena that may have a direct influence on those functions. He performed Donath and Tanne's test of uranin injection, which permits a good estimation of the absorption, in 125 patients suffering with different dermatologic conditions. He concludes that each individual reacts to the test in a constant personal way, that grave local lesions of the tegument may have an influence on the absorption of the subcutaneous tissue, and that the characteristics of absorption are different for each individual.

Microbes in Bile

Dr. Sciuti of Catania recently reported his experiments performed to ascertain whether or not bacteria are present in the bile of the normal gallbladder. While some authors state that bile not only is sterile but possesses antiseptic properties, others state that only the bile of the intrahepatic ducts is sterile and that the bile of the gallbladder and of the middle third of the common bile duct is contaminated by bacteria. The speaker determined the bacterial contents in common and centrifugated bile from normal gallbladders of twelve dogs and thirty-four oxen. He concluded that bile from living animals, as well as that taken immediately after the animal has been killed, frequently is contaminated by either colon bacilli or staphylococci. A condition of latent microbism was found in the bile content of normal gallbladders in the majority of the animals. The anatomic conditions of the gallbladders from which the bile was obtained indicated that the latent microbism does not provoke, as a rule, noticeable pathogenic symptoms.

Cisternomalarial Therapy

Drs. Mariotti and Sciuti recently reported to the Academia delle Scienze Medico-Chirurgiche of Naples the results of their work on malarial therapy in dementia paralytica. Having in mind the good therapeutic results obtained from the injections of malarial blood into the spinal cavity, so as to have closer contact between the spirochetes in the neuraxis and the malarial virus, they injected malarial blood into the cisterna magna in sixteen patients with dementia paralytica, all in advanced stages of the disease. Obrega and Esckuchen's technic was followed. All patients, even those who had resisted other methods of malarial therapy, reacted, after a period of incubation that was shorter in those who received blood taken during the apyretic period of the malarial patient, with intense fever. The condition did not change in four patients; one died in about three months after the treatment, and the remaining patients were improved. They believe that cisternomalarial therapy is a new and efficient method for the treatment of dementia paralytica. They also believe that this method is better than that of Ducosté and his collaborators, who injected the malarial blood into the white substance of the frontal lobe and in the cerebral ventricles, with an immediate mortality of 9 per cent with the ventricular method.

Mechanism of Fever

Dr. Salmon recently reported to the Accademia Medico-fisica Florentina the results of his studies on the importance of the endocrine factors in the mechanism of fever. The nuclei of the tuber cinereum, either because of their vegetative nature or because of their close relation to the endocrine apparatus, have an action of regulation on the body temperature. The fact that the stimulation of the tuber cinereum provokes a hypersecretion of epinephrine (according to Houssay and Molinelli), and the close functional synergy between the tuber cinereum and the posterior lobe of the hypophysis, justify the hypothesis that the sudden reaction of the tuber cinereum by which fever is determined manifests itself with a suprarenal and pituitary hypersecretion. This hypothesis, which would clarify many febrile phenomena, such as chills, tachycardia and the retention of water, is confirmed by the fact that fever does not follow the puncture of the tuber cinereum in suprarenalectomized animals. Besides that, fever determines the temporary disappearance of diabetes insipidus, as a result of the hyperactive functions of the posterior lobe of the hypophysis.

BUCHAREST

(From Our Regular Correspondent)

Nov. 7, 1934.

A Study of Total Deafness

Some time ago, Dr. Novak of Prague, director of an institute for deaf and mute patients, published the results of experiments undertaken to establish whether there is absolute deafness or not. He concluded that there is no absolute loss of the hearing power. Similar experiments were carried on in Rumania by Dr. Koleszár, who, like Novak, chiefly used radio amplifiers. His experiments revealed that the majority of deaf people are still sensitive to several tones. The limit of oscillations to which the deaf are yet sensitive is between 128 and 1,024. It was also revealed that if deaf persons hear music or singing, with adequate amplifying, they are able to hear only pure tones. They clearly hear only the pure basal tones and those between certain limits. This explains why they are unable to distinguish between the tones of a violin and of a clarinet. When listening to a band, they feel as if only one instrument were playing. This is true in regard to speaking tones. If deaf persons hear something in a talk at all, they hear wholly different tones than a normal person. They hear better the deep tones. Soprano voices they do not notice at all. Certain consonants they do not hear at all. Thorough investigations show it possible exactly to know what hearing power remains. The greatest achievement of the investigation is establishment of the fact that there is no total human deafness toward every tone as long as the hearing organ is not fully destroyed.

Proposed Radical Changes in the Public Health Service

Costinescu, minister of public health, has proposed the adoption of a regulation intended to encourage young physicians to settle in villages where there is a great scarcity of able practitioners. The state would guarantee to such new physicians 2,000 lei ($20) a month. The ministerial council has approved the idea but finds that the plan cannot be enforced by a regulation, so it has instructed the minister to draft a law, to be placed shortly before the national assembly.

The ministerial council wishes to alter this plan by a radical change in the public health service. According to its plan, every public health service, state or private, should be under the direction and control of the ministry of health. All county and municipal hospitals would come into the sphere of action of the ministry. Health institutes (social insurance, pay offices) would carry on their administration autonomically, but the medical staff would be under the control of the ministry.

Marriages

RALPH HAYES HOFLER, P. A. S., Lieut., U. S. Navy, to Miss Emily Louise Lawrence of Portsmouth, Va., in San Diego, Calif., December 1.

ZELMA ROWENA MACKIN MCMANUS, Tyro, Kan., to Mr. Ian Sinclair Mackillop of Detroit at Independence, recently.

CHARLES THOMAS BROWN, San Marcos, Texas, to Mrs. Katie Belle Le Wrage of San Antonio, December 8.

CHESTER B. THRIFT, Rapid River, Mich., to Miss Mildred Russell at Bay City, November 4.

FRANK E. WHITACRE, Chicago, to Miss Lillian Myers of Sylvania, Ohio, November 21.

HARLEY J. GUNDERSON to Mrs. Winifred Coe Dix, both of Los Angeles, November 25.

Deaths

Harmon Smith, New York; Bellevue Hospital Medical College, New York, 1897; member of the American Laryngological, Rhinological and Otological Society; past president of the American Laryngological Association; fellow of the American College of Surgeons; formerly professor of clinical surgery (laryngology and rhinology), Cornell University Medical College; surgeon and director of the throat department, Manhattan Eye, Ear and Throat Hospital; consulting laryngologist to the Memorial Hospital and Babies' Hospital, New York; consulting throat surgeon to the Muhlenburg Hospital, Plainfield, N. J., and consulting otologist to the Monmouth Memorial Hospital, Long Branch, N. J.; aged 62; was found dead, December 11, of a wound in the chest, presumably self inflicted.

Andrew Buchanan Small, Dallas, Texas; Memphis (Tenn.) Hospital Medical College, 1888; member of the House of Delegates of the American Medical Association from 1915 to 1916; member and formerly councilor of the fourteenth district of the State Medical Association of Texas; fellow of the American College of Surgeons; professor of clinical surgery, Baylor University College of Medicine since 1915; professor of principles of surgery, Southern Methodist University Medical Department, 1909-1914; senior associate surgeon to the Baylor Hospital and Dispensary; aged 71; died, November 29, of coronary occlusion.

William Webster, Winnipeg, Manit., Canada; Manitoba Medical College, Winnipeg, 1895; associate professor of clinical surgery and anesthesia at his alma mater; member of the Associated Anesthetists of the United States and Canada; served during the World War; author of "Science and Art of Anesthesia" and "Anesthesia for Nurses"; aged 69; for many years anesthetist to the Winnipeg General Hospital, where he died, October 23, as a result of inhaling fumes while extinguishing a fire in his boat.

Herbert Henry Sharpe ✠ Lieut. Colonel, M. C., U. S. Army, Manila, P. I.; Long Island College Hospital, Brooklyn, 1906; entered the medical corps of the U. S. Army as a first lieutenant in 1911 and rose through the various grades to that of lieutenant colonel in 1931; served during the World War; aged 51; for two years stationed at the Sternberg General Hospital, where he died, November 6, of coronary occlusion and arteriosclerosis.

Harvey Mitchell Righter ✠ Philadelphia; Jefferson Medical College of Philadelphia, 1896; also a dentist; demonstrator of clinical surgery at his alma mater; served during the World War; aged 62; on the staff of the Philadelphia General Hospital and of the Jefferson Hospital, where he died, November 24, of pneumonia.

Leo Pecci Bell, Sacramento, Calif.; Harvard University Medical School, Boston, 1915; member of the California Medical Association; fellow of the American College of Surgeons; served during the World War; formerly on the staff of the Woodland (Calif.) Clinic Hospital; aged 43; died, October 4.

Henry S. Ward, Springfield, Vt.; University of Vermont College of Medicine, Burlington, 1887; member of the Vermont State Medical Society and the Associated Anesthetists of the United States and Canada; on the staff of the Springfield Hospital; aged 69; died, September 13, of coronary thrombosis.

John Aaron Kendrick, Greenville, Ala.; Tulane University of Louisiana Medical Department, New Orleans, 1894; member of the Medical Association of the State of Alabama; past president of the Butler County Medical Society; on the staff of the Stabler Infirmary; aged 62; died in November.

Martin Otis Heckard ✠ Chicago; Bellevue Hospital Medical College, New York, 1893; for many years registrar of the bureau of vital statistics, city health department; aged 71; died, November 23, in the Illinois Masonic Hospital, of myocarditis and hypertrophy of the prostate.

William Lee Stubbs, Dutton, Ala.; University of Alabama Medical Department, Mobile, 1899; member of the Medical Association of the State of Alabama; president of the Jackson County Medical Society; aged 61; was found dead, November 26, of angina pectoris.

George Clarence Parcher ✠ Saugus, Mass.; College of Physicians and Surgeons, Baltimore, 1893; served during the World War; for many years on the staffs of the Union and Lynn hospitals, Lynn; aged 63; died, November 29, in the Palmer Memorial Hospital, Boston.

Solis-Cohen Bogh Hertzog ✠ Reading, Pa.; University of Pennsylvania School of Medicine, Philadelphia, 1923; formerly superintendent of the Berks County Tuberculosis Sanatorium; aged 39; on the staff of St. Joseph's Hospital, where he died, November 6, of pneumonia.

J. Louis Simpson, Brooklyn; Fordham University School of Medicine, New York, 1918; member of the Medical Society of the State of New York; on the staffs of the Coney Island, Kings County and St. Mary's hospitals; aged 45; died suddenly, November 7, of heart disease.

Clarence Anson Neighbors, Anaheim, Calif.; Kansas City (Mo.) Medical College, 1905; member of the California Medical Association and the American Academy of Ophthalmology and Oto-Laryngology; aged 54; died, November 14, in St. Vincent's Hospital, Los Angeles.

Philip Leach ✠ Medical Director, Captain, U. S. Navy, retired, New York; Rush Medical College, Chicago, 1881; entered the navy in 1891 and retired in 1919 on attaining the age of 64; fellow of the American College of Surgeons; aged 78; died, October 19.

Thomas L. Ryan, Saginaw, Mich.; Western University Faculty of Medicine, London, Ont., Canada, 1899; member of the Michigan State Medical Society; formerly on the staff of St. Mary's Hospital; aged 64; died suddenly, August 31, of angina pectoris.

Samuel Davenport Etkin, New York; Long Island College Hospital, Brooklyn, 1908; member of the Medical Society of the State of New York; on the staffs of the Harlem and Mount Sinai hospitals; aged 51; died, November 25, of acute coronary occlusion.

Edwin C. Taylor ✠ Jackson, Mich.; University of Buffalo School of Medicine, 1879; member of the House of Delegates of the American Medical Association in 1923; aged 75; died, November 11, at his winter home in Howey-in-the-Hills, Fla.

John Thomas Rimer, Clarion, Pa.; College of Physicians and Surgeons, Baltimore, 1881; member of the Medical Society of the State of Pennsylvania; past president and secretary of the Clarion County Medical Society; aged 79; died, October 29.

Hugh Mackay, Winnipeg, Manit., Canada; Manitoba Medical College, Winnipeg, 1895; formerly assistant professor of medicine and dermatology at his alma mater; on the staff of the Winnipeg General Hospital; aged 70; died, October 12.

William C. Nordholz ✠ Oak Park, Ill.; Jenner Medical College, Chicago, 1911; served with the American Red Cross during the World War; on the staff of the Garfield Park Hospital; aged 49; died, December 7, of coronary thrombosis.

John Gilbert, Fall River, Mass.; University of Vermont College of Medicine, Burlington, 1886; member of the Massachusetts Medical Society; Civil War veteran; aged 87; died, November 2, of arteriosclerosis and chronic myocarditis.

Howell Lea Castleman ✠ Sylacauga, Ala.; University of the South Medical Department, Sewanee, Tenn., 1901; past president of the Talladega County Medical Society; aged 63; died, November 24, of heart disease, following influenza.

William Zimmermann, Denver; University of Colorado School of Medicine, Denver, 1912; member of the Colorado State Medical Society; aged 56; died, October 5, in St. Luke's Hospital, of cerebral hemorrhage and arteriosclerosis.

Adam Wood Montague, Fort Worth, Texas; Tulane University of Louisiana School of Medicine, New Orleans, 1916; member of the State Medical Association of Texas aged 41; died, November 24, of coronary occlusion.

Burt B. Lamkin ✠ Fresno, Calif.; College of Physicians and Surgeons of San Francisco, 1902; member of the Pacific Coast Oto-Ophthalmological Society; on the staff of the Sample Sanitarium; aged 58; died, October 22.

Albro Joseph Ames, Potter, Neb.; John A. Creighton Medical College, Omaha, 1901; aged 83; died, November 14, in a hospital at Kimball, S. D., of pneumonia resulting from injuries received in an automobile accident.

Cary Carpenter Bradford, Southbridge, Mass.; Harvard University Medical School, Boston, 1882; member of the Massachusetts Medical Society; aged 79; died, October 20, of chronic myocarditis and diabetes mellitus.

Charles Schmidli, Bonfield, Ill.; Reliance Medical College, Chicago, 1910; member of the Illinois State Medical Society; aged 63; died, October 19, in St. Mary's Hospital, Kankakee, of intestinal obstruction.

Charles Everett Carter Peyton, Pulaski, Va.; University of the City of New York Medical Department, 1877; member of the Medical Society of Virginia; aged 79; died, October 30, in a hospital at Roanoke.

Daniel Porter Mixson, Headland, Ala.; Atlanta College of Physicians and Surgeons, 1902; member of the Medical Association of the State of Alabama; aged 54; died, November 9, of cerebral hemorrhage.

William Luther Royster, Indianapolis; Kentucky University Medical Department, Louisville, 1906; served during the World War; aged 51; died, November 24, in the Methodist Hospital, of pneumonia.

William Brooks Turner, Florence, Ala.; University of Nashville Medical Department, 1904; member of the Medical Association of the State of Alabama; aged 56; died, November 28, of pneumonia.

Albert A. Dye, De Funiak Springs, Fla.; Rush Medical College, Chicago, 1871; Civil War veteran; formerly mayor of Madison, Wis.; aged 89; died, November 24, in Asheville, N. C., of carcinoma.

Emily Frances Murphy, Taunton, Mass.; College of Physicians and Surgeons, Boston, 1892; member of the Massachusetts Medical Society; aged 75; died, November 14, of injuries received in a fall.

Charles Edward Park, De Witt, Ark.; St. Louis University School of Medicine, 1903; member of the Arkansas Medical Society; aged 55; died, November 20, in the Baptist Hospital, Memphis, Tenn.

Bernhard F. Bellack ✙ Columbus, Wis.; College of Physicians and Surgeons of Chicago, 1890; on the staff of St. Mary's Hospital; aged 72; died, November 22, of heart disease.

Charles Ober Kepler, Brookline, Mass.; Harvard University Medical School, Boston, 1899; member of the Massachusetts Medical Society; aged 66; died, November 1.

James Halbert Conoly Jr. ✙ Gloucester City, N. J.; Temple University School of Medicine, Philadelphia, 1925; aged 36; died, November 21, of pneumonia.

John George Hugo, New Haven, Conn.; College of Physicians and Surgeons, Baltimore, 1903; served during the World War; aged 54; died, November 11.

J. Bennett Millard, Bristol, Va.; Louisville (Ky.) and Hospital Medical College, 1908; aged 48; died, November 4, in a local hospital, of pneumonia.

Ernest Adolphus Sturge, San Mateo, Calif.; University of Pennsylvania School of Medicine, Philadelphia, 1880; aged 78; died, October 12.

Oren A. Chitwood, Fort Worth, Texas; College of Physicians and Surgeons, Baltimore, 1883; aged 77; died, November 6, of angina pectoris.

Francis James Albro Cochran, Toronto, Ont., Canada; Bellevue Hospital Medical College, New York, 1892; aged 69; died, October 23.

Joseph James McVety, Old Town, Maine; College of Physicians and Surgeons, Boston, 1912; aged 47; died, October 31.

Thomas Elbert Rushing, Ramer, Ala.; Medical College of Alabama, Mobile, 1890; aged 68; died, in October, in Eureka, Texas.

Milne Brownlee, Woodstock, Ont., Canada; Faculty of Medicine of Trinity College, Toronto, 1886; died, October 8.

John Cabell Moseley, Henderson, Ky.; Kentucky School of Medicine, Louisville, 1896; aged 59; died, November 15.

Charles H. Matthews, Mount Orab, Ohio; Starling Medical College, Columbus, 1893; aged 72; died, November 8.

William H. Waller, Angola, Ind.; Detroit Medical College, 1874; aged 85; died, November 26, of cholangeitis.

Stith T. Hurst, Los Angeles; Rush Medical College, Chicago, 1871; aged 90; died, October 24.

Wilbur N. Morell, Verndale, Minn. (licensed in Minnesota in 1883); aged 77; died, November 10.

Correspondence

THALLIUM NEURITIS

To the Editor:—It seems odd that Cobb and Coggeshall in their extensive and instructive article on neuritis (THE JOURNAL, November 24, p. 1608) in listing the chemical causes of neuritis should have overlooked or omitted thallium. This element has been used for the removal of hair in the treatment of tinea capitis, and although its use by dermatologists has been markedly restricted because of the danger of neuritis resulting in blindness or paralysis, the "patent" drug promoters fearlessly entered the field, as exemplified by Koremlu, which bankrupted its backers through numerous lawsuits.

Thallium is also used extensively as a rodenticide (Munch, J. C.; Ginsburg, H. M., and Nixon, C. E.: The 1932 Thallotoxicosis Outbreak in California, THE JOURNAL, April 29, 1933, p. 1315) and in nonfatal doses may also cause polyneuritis and optic atrophy.

FRANCIS A. ELLIS, M.D., Baltimore.

TRIORTHOCRESYL PHOSPHATE AND POLYNEURITIS

To the Editor:—In a paper on Neuritis by Cobb and Coggeshall in THE JOURNAL, November 24, the subject of triorthocresyl phosphate polyneuritis is discussed. The following references are cited by the authors for this type of neuritis on page 1615:

Vonderahe, A. R.: Pathologic Changes in Paralysis Caused by Drinking Jamaica Ginger, *Arch. Neurol. & Psychiat.* **25:** 29 (Jan.) 1931.
Merritt, H. H., and Moore, M.: *New England J. Med.* **203:** 4 (July) 1930.
Mella, Hugo: A Preliminary Report on the Treatment of Paralysis Agitans, *Arch. Neurol. & Psychiat.* **7:** 137 (Jan.) 1922.
Smith, M. I., and Elvove, Elias: *Pub. Health Rep.* **45:** 1703 (July 25) 1930.

The reference to Mella's paper is obviously an oversight or typographic error, for this report deals with arsenic and not triorthocresyl phosphate, which, so far as I have been able to ascertain, was not known to medical science until 1930.

Neither Vonderahe nor Merritt and Moore make any mention whatever of triorthocresyl phosphate as a possible etiologic factor in "ginger paralysis," and it is very improbable that they knew anything about it. Vonderahe described the pathologic changes in several cases of "ginger paralysis," suggesting a toxin that might reach the peripheral nerves through the circulation and thence travel into the central nervous system along the nerve fibers and anterior roots. The paper of Merritt and Moore merely reports on the clinical aspects of fifteen cases of "ginger paralysis." It is true they suggest some toxic substance, but all they say with regard to it is that "the exact nature of this toxic substance is not known."

The precise etiologic relationship of triorthocresyl phosphate to "ginger paralysis," and its pharmacology, biochemistry and pathology were published in the following series of papers:

Smith, M. I.; Elvove, Elias; Valaer, P. J., Jr.; Frazier, W. H., and Mallory, G. E.: *Pub. Health Rep.* **45:** 1703 (July 25) 1930.
Smith, M. I.; Elvove, Elias, and Frazier, W. H.: *Pub. Health Rep.* **45:** 2509 (Oct. 17) 1930.
Smith, M. I., and Lillie, R. D.: Histopathology of Triorthocresyl Phosphate Poisoning, *Arch. Neurol. & Psychiat.* **26:** 976 (Nov.) 1931.
Smith, M. I., and Elvove, Elias: *Pub. Health Rep.* **46:** 1227 (May 22) 1931.
Smith, Engel and Stohlman: Bull. 160, Nat. Inst. of Health, 1932.
Smith, M. I.; Lillie, R. D.; Elvove, Elias, and Stohlman, E. F.: *J. Pharmacol & Exper. Therap.* **49:** 78 (Sept.) 1933.
Smith, M. I., and Stohlman, E. F.: *Pub. Health Rep.* **48:** 734 (June 23) 1933.
Smith, M. I., and Stohlman, E. F.: *J. Pharmacol. & Exper. Therap.* **51:** 217 (June) 1934.

The paper by Harmsma and van Esveld to which the authors refer in connection with "apiol neuritis," which by the way should have been van Itallie, Harmsma and van Esveld, pub-

lished in the *Archiv für experimentelle Pathologie und Pharmakologie* **165**:84, 1932, merely confirms the work of the National Institute of Health, showing that a brand of apiol adulterated with triorthocresyl phosphate produced the same type of polyneuritis in several European countries in 1931 as did the ginger beverage similarly adulterated in the United States in 1930.

M. I. SMITH, M.D., Washington, D. C.
Principal Pharmacologist,
National Institute of Health.

FACTORS IN INFANT MORTALITY

To the Editor:—Dr. Levy, in his communication published in THE JOURNAL December 1, in criticism of the article by Drs. Grulee, Herron and myself, stated that "in the presence of such statistical errors, as I have indicated, the case cannot be considered proved." These statistical errors consist of two criticisms.

The first criticism is that we state that the mortality of the group reported was less than one-fourth that of the infant mortality of the same region. This, he says, is incorrect because our group does not contain deaths before 3 weeks of age, whereas the infant mortality of the same region includes all deaths from birth. The infant mortality quoted does not contain deaths occurring in the first two weeks of life. Our only reason in even mentioning these mortalities was to show that our babies were cared for as well as those in the same locality. We are not attempting to compare the results of our controlled group with any "city, state or nation as a whole." What we are trying to show is that, in 20,000 babies, 66 per cent of the total mortality was in 8.5 per cent of the group, which represented the artificially fed babies.

The second criticism is that our group of families contained too many Italian and Russian mothers, and that the infant mortality rate is always lower in babies of these nationalities. In this we heartily agree with Dr. Levy, as their infant mortality rate is lower because the majority of their babies are breast fed, which is exactly what we are trying to show.

HEYWORTH N. SANFORD, M.D., Chicago.

Queries and Minor Notes

ANONYMOUS COMMUNICATIONS and queries on postal cards will not be noticed. Every letter must contain the writer's name and address, but these will be omitted, on request.

ABDOMINAL PAIN IN CHILDREN

To the Editor:—When a small child complains slightly of indefinite abdominal pain, with a normal temperature, either no vomiting or possibly vomiting once and the bowels practically normal, with so little tenderness of the abdomen on pressure and so little rigidity of the muscles that they can be scarcely distinguished, what disease is he suffering from, especially when the blood count shows a leukocytosis of from 18,000 to 23,000, with the lymphocytes about 14 per cent and the polymorphonuclears at about 85 to 90 per cent with no urinary symptoms? I have seen several instances of this type and recovery has occurred without operation; but I still think that the condition was acute appendicitis. Are there any other diseases of this character that would give a blood picture like this? In some of these cases it is very difficult to make a diagnosis and I would like to know if there are others who have this difficulty.

J. A. POIRIER, M.D., Forest Lake, Minn.

ANSWER.—The chief symptoms of the small child described in this query are vague abdominal pain with or without vomiting. The chief physical observations are indefinite tenderness and muscular rigidity, and the laboratory examination reveals leukocytosis and increase of the polymorphonuclear elements in the blood. It is stated that there is a normal temperature and that urinary symptoms are absent, though it is not stated whether urinalysis has been done.

Acute appendicitis cannot be ruled out on the information given. In infants and young children the symptoms of appendicitis vary greatly from those which occur in older children and adults. In infants and young children suffering from acute appendicitis the temperature may be high or it may be normal or even subnormal. Vomiting may or may not occur and, though constipation is the rule, diarrhea may accompany the disease in a certain number of instances. Pyuria may be associated with appendicitis. A polymorphonuclear leukocytosis usually exists. Tenderness over McBurney's point is of great diagnostic importance, if it can be elicited. In young children the appendix frequently lies so deep that the tenderness may be deflected toward the left or upward or it may be entirely absent. Rectal examination in doubtful cases is often extremely helpful, for when palpable resistance on the right side is encountered during this procedure the diagnosis of appendicitis should be strongly suspected. The diagnosis in infants and young children is often extremely difficult and may be confused with intussusception, intestinal obstruction, diffuse peritonitis, pleurisy, pneumonia, gastro-intestinal disturbances, and iliopsoas abscess. In fact, acute appendicitis at this age may be confused with nearly any of the diseases with which infants or young children may be afflicted, because at this age subjective pain is poorly localized and objective signs may be vague or absent. Pain from an earache or sore throat is often referred to the abdominal region by the child, and skill and practice in palpation are necessary to elicit tenderness and muscular rigidity. Any acute infection or infectious disease in a young child may be associated with indefinite abdominal pain and a polymorphonuclear leukocytosis, except those diseases characterized by leukopenia or a leukocytosis of a lymphocytic nature.

PREMATURE OSSEOUS UNION OF SKULL SUTURES

To the Editor:—I have a patient, a baby 10 weeks old, with premature osseous union of the sutures of the skull and of the fontanels. Can and will you give me data on this? Treatment, I suppose, there is none. The infant has the appearance of mental deficiency. The father has had a severe case of diabetes for ten years.

M.D., California.

ANSWER.—The condition described is probably microcephalus. It has sometimes been regarded as due to defective bony growth or premature ossification of the skull, but in most cases the early ossification of the skull is usually a consequence of arrested growth of the brain, and not the reverse. A microgyria is present, with agencies of the cortex. The reasons for the developmental arrest of the brain are mostly unknown. If the circumference of the head is much below the average for the age and relatively much less than the measurements of the rest of the body, microcephalus is present. Normally throughout infancy the circumference of the head, chest and abdomen are nearly the same.

The symptoms of microcephalus are those of mental deficiency and often spastic paralysis existing in various combinations and severity. Convulsions often supervene.

As the essential condition in microcephalus is an arrested development of the brain, operative procedures are of no avail. There is no relationship to the parent's diabetes.

RIDGES OF FINGER NAILS

To the Editor:—Will you please tell me if there is any treatment for longitudinal ridges on the finger nails? Please omit name.

M.D., Pennsylvania.

ANSWER.—Longitudinal ridges on the finger nails are mentioned as occurring in gout, and some English physicians maintain that they are diagnostic. This, however, is probably no more true for longitudinal ridges than for transverse furrows or other malformations of the nail, which are caused by a great variety of general or local disorders.

Senility is also a well known cause of longitudinal ridges. Cases have been reported in association with alopecia areata. One observer saw the nail changes occur with two attacks of the scalp disorder, the nails having returned to normal between attacks.

Congenital dystrophy of the nails sometimes takes this form. Crocker mentions this (Crocker, H. R.: Disease of the Skin, ed. 3, Philadelphia, P. Blakiston's Son & Co., 1903, p. 1255) in a boy, aged 12 years, with a central ridge with a parallel groove each side of it on each of his finger nails. The nails were rough, thin and soft. No etiologic factor was found except cold hands. The toenails were normal.

The patient should be thoroughly studied to discover any local or general cause for the nail changes. If this is found, it should be treated. If none is found, pushing the vitamins and protecting the nails against dryness by local applications of ointment of rose water may be tried. Alternating hot and cold baths to stimulate circulation might be of benefit, or even galvanic and faradic electrotherapy.

V 1
193

DIAGNOSIS OF SKIN SENSITIZATION AND FUNGOUS INFECTION

To the Editor:—My sister has had an intractable dermatitis. It began at 15 years of age with involvement of the left index finger. The eruption at that time consisted of exfoliation of the skin; there were no vesicles and no ulceration. The condition would entirely disappear under symptomatic treatment. The patient entered a hospital and trained for nursing at 18 years of age. During this time the condition became worse. The hands, fingers and wrists would scale, leaving small fissures and areas of ulceration, which would bleed easily. Later vesiculation set in with intolerable itching and burning. While she was in training, the condition spread to both feet, localized mostly to the skin posterior to the ankle joints over the achilles tendon. She was treated at that time by several dermatologists and received ointments, two series of roentgen treatments, and ultraviolet irradiations with but little relief. Since graduation the condition has been gradually progressing for four years with intervals of quiescence. The patient has been nursing at intervals since graduation and was nursing when the present attack set in. In March 1934 she reported for duty at a hospital and was given one injection of typhoid vaccine, diphtheria inoculation and vaccination for smallpox, which was immediately followed, within three days, by a severe dermatitis, vesiculation followed by ulceration with secondary infection, marked swelling of the wrists and feet, severe itching and burning. The last attack occurred three months ago, followed by gradual improvement. At present the patient is 26 years of age and is married; there are no children. She complains of itching and burning of the hands and feet, loss of weight, sleeplessness and weakness. The husband is well. The family history is negative. The patient has had whooping cough, measles and hay fever. She weighs 109 pounds (49 Kg.) and is 5 feet 2 inches (157.5 cm.) in height. She is restless and depressed. There is a vesicular scaling eruption of the fingers, the wrists, and the posterior aspects of the lower extremity of the legs, the dorsum of the feet at the base of the toes, the plantar aspect of the right great toe and the lateral aspect of the left little toe. Some fissuring, small areas of ulceration, and injection with moderate thickening of the skin have occurred where healing is taking place. Pus has formed in small areas of the feet and about two fingernails. The skin of the remainder of the body is normal. The temperature is 98 F.; pulse, 80; systolic blood pressure, 106; diastolic, 60; hemoglobin, 75 per cent; red cells, 4,050,000; leukocytes, 6,600; small lymphocytes, 8 per cent; large lymphocytes, 12 per cent; polymorphonuclears, 79 per cent; eosinophils, 1 per cent. Blood chemistry reveals nonprotein nitrogen 30, creatinine 1.4, sugar 100. The urine is amber, with a specific gravity of 1.022; it is alkaline, negative for albumin and sugar, and shows a few pus cells microscopically. Treatment at present has consisted of a free diet, calcium chloride intravenously every third day, epinephrine 1 cc. daily, and ointments of oil of cade, procaine hydrochloride and hydrous wool fat. I would appreciate help as to diagnosis and treatment. Please omit name.

M.D., New York.

ANSWER.—Whether the original scaly eruption on the finger was an infection or a local sensitization it is impossible to say, but the case in its later development is evidently a sensitization to one, perhaps several, substances. The recent recurrence was precipitated perhaps by the reaction commonly occurring after injection of typhoid vaccine or the combination of other foreign proteins. A specific sensitization to some one of these foreign proteins may exist. This should be investigated; but the recurrence of the dermatitis can be explained without assuming specific sensitization.

The nature of the vesicles may give some information. If they are very small and easily ruptured, the likelihood of a complicating fungous or bacterial infection is slight. If, as seems probable from the description, they are several millimeters in diameter and rather tough roofed, it is possible that infection complicates the sensitization dermatitis. The roofs of several vesicles should be examined for fungi, and cultures should be made of the vesicle contents on plain and sugar mediums, preferably Sabouraud's maltose agar. To detect food sensitization, the nonallergic diet advised by Rowe may be used, adding one food at a time until, by exacerbation of the eruption, the offending food is found.

An effort must be made, by careful questioning of the patient, by scratch and patch tests with all contact substances, to discover the nature of the sensitization. If this can be done, recovery will be greatly facilitated. If not, general rules of treatment must be followed.

Whether or not a mixed infection is present, the local management may well be begun by painting the vesicular eruption once daily with 1 or 2 per cent potassium permanganate. Before this is begun, a small area should be tested with this medicament for a day to determine whether it irritates the sensitive skin. This rule should be followed with each new local application, particularly those applications which stimulate. If preferred, cool wet dressings of solution of aluminum acetate in from 5 to 20 per cent solution may be used, the dressings made thin so as to facilitate evaporation, and frequently wrung out of the cool solution.

If a fungous infection is present, the next application, after vesiculation has ceased, should be crude coal tar ointment, to which the skin is seldom sensitive. This is spread on thin, removed once a day with oil, and then renewed. A weak Whitfield ointment may be used, or a lotion of 2 per cent salicylic acid and 2 per cent resorcinol in 50 per cent alcohol may be dabbed on frequently.

A bacterial infection may require the use of stronger bactericides such as ammoniated mercury; but the danger of irritation is much greater with these, and the use of potassium permanganate at the beginning of the treatment will probably eliminate such an infection. When the infection has been subdued, soothing ointments may be used—a thin application of zinc oxide paste or ointment, removed daily with oil, and then the ointment renewed. If the ointment alone does not control the itching, the antipruritics phenol, menthol, camphor or one of the tars may be used in addition to the soothing ointment. As needed, stimulants, the tars, bitumen sulphonate, resorcinol or sulphur may be used with caution, after a preliminary test as suggested. As the eruption changes, a corresponding change in local application must be made.

Procaine hydrochloride should not be used. It has no value for external use and may add another to the list of sensitizations already present.

To raise the irritation threshold, the calcium chloride treatment is helpful; but if it has already been used for some time, it had better be discontinued, at least temporarily. If a sensitization to some particular kind of meat has been determined, that, of course, should be interdicted. Other meats should be allowed in moderation. Sodium chloride may well be restricted, particularly if the patient is nervous and requires bromides, which seldom cause skin eruption and are often of great value in the control of sensitization.

In chronic sensitization, even when arsenic or other metallic poisoning cannot be determined, intravenous injections of sodium thiosulphate sometimes are of great benefit. They should be employed, as for arsphenamine dermatitis, every day for the small doses, every second or third day for the large doses. Whether they act by raising the threshold of irritation or as a mild shock therapy is not known.

Other forms of shock therapy, intramuscular injections of sterile milk or intravenous typhoid vaccine, should be employed with great caution, if at all, for the reactions are hard to control.

ICTERIC PRURITUS

To the Editor:—A man, aged 70, has a tumor of the right kidney and also one of the gallbladder. The latter is partially obstructing the common duct, causing a mild but intensely itchy jaundice, which has resisted treatment so far. Because of his age and poor cardiorespiratory function, surgeons deem operation inadvisable. However, the patient states that he feels fine except for the itching. Can you suggest any form of treatment, either external or internal? Could you give me any references on the symptomatic treatment of icteric pruritus? Kindly omit name.

M.D., Connecticut.

ANSWER.—General hygienic regulation is of great importance. The diet should be an easily digested one, from which alcohol in all forms and condiments should be excluded. Tobacco should be reduced as much as the comfort of the patient permits.

Hot baths, simple or with sodium bicarbonate, or hot wet compresses may be helpful; but measures should be taken to counteract the drying effect of hot baths. During the bath the skin should not be rubbed. When the patient emerges from the bath, the skin should be partially dried by patting with a towel, and then talcum powder or an ointment such as 10 per cent boric acid in ointment of rose water should be applied. No towel at all may be still better, the water being allowed to evaporate partly, and then the talcum powder applied.

Demulcent baths, if the skin is very dry, may be better. Such a bath is made by boiling two cupfuls of oatmeal in a gauze bag for five minutes, allowing the water to cool, then adding it and the bag to the bath, in which the sodium bicarbonate has already been dissolved. Squeezing the bag forces out the fine particles, which are of value. Soap, and that the mildest, should be used only on the hands, feet and hairy parts.

Locally, calamine lotion made with equal parts of lime water and rose water, or made still less drying by the addition of 5 per cent glycerin, may be used with 0.5 per cent each of menthol and phenol; if it causes chilling, the menthol may be omitted. Camphor chloral may be used in from 2 to 5 per cent strength. If the lotion is too drying, calamine liniment, so called, may be used. It is composed of equal parts of lime water and olive oil, to which calamine powder and zinc oxide are added, 12 per cent of each.

Coal tar solution or alkaline solution of tar may be used in an aqueous solution in 3 per cent strength as a lotion. Alcoholic lotions of 50 per cent strength may be used. They are more cooling but also more drying to the skin.

Though the etiologic factor is impossible to remove, the case is still in a more favorable position than many of the cases of

pruritus in which the etiology is entirely dark. The use of ergotamine tartrate in doses of 0.001 Gm. by mouth three times a day for a few days has given excellent results according to Lichtman (The Therapeutic Response to Ergotamine Tartrate in Pruritus of Hepatic and Renal Origin, THE JOURNAL, Nov. 14, 1931, p. 1463). The drug in this dosage seems to be without unpleasant reactions.

The use of hypertonic salt or sugar solution (osmotherapy of Stejskal) intravenously sometimes benefits pruritus by disturbance of the colloidal balance. In this case the sugar may benefit the liver. The urine should be examined for sugar after each injection and, if glycosuria appears, insulin may be given.

Insulin alone in small doses, from 10 to 20 units, is said by several authors to exert an excellent influence in pruritus (Sparks, R. A.: Insulin Therapy of Pruritus, *J. Missouri M. A.* **26**:24 [Jan.] 1929).

Sodium thiosulphate intravenously often lessens itching. It may be combined with sugar solution, 1 Gm. dissolved in 10 cc. of sterile distilled water and added to 50 cc. of the 50 per cent sugar solution.

Calcium salts by mouth or intravenously and calcium gluconate by mouth, intramuscularly or intravenously may lessen itching by reducing the irritability of the skin, supposedly by causing thickening of the blood vessel walls.

Blood removed from the patient's vein and immediately reinjected in his gluteal muscles may be of benefit. From 5 to 20 cc. is to be given every fifth day.

Of the older remedies, pilocarpine is highly recommended, given hypodermically with caution in doses of from 0.005 to 0.02 Gm. (one-tenth to one-third grain) once or twice daily, depending on the duration of the effect. Just enough to moisten the skin should be given.

Tincture of cannabis may be tried, from 0.6 to 2 cc. (10 to 30 minims) well diluted after each meal.

EDEMA OF ANKLES

To the Editor:—Mrs. M. G., aged 36, was seen by me about two months ago, because of edema of the ankles and feet of three years' duration. The edema is worse at night and is entirely relieved if the patient remains in bed for a few days. The past history is negative. The patient had one abortion. She has not undergone any operations or had serious ailments. The husband and one child (18 years old) are both living and well. Menstruation occurs every twenty-eight days, is regular, and lasts for four days. There is no dysmenorrhea. Physical examination is essentially negative. The blood pressure is 120 systolic, 80 diastolic. The ankles and feet appear about one and one-half times the normal size; the edema is more marked on the left. A few superficial varicosities were noted on the legs. Deep veins are patent. Laboratory examination of the urine gave negative results on five tests. The Wassermann reaction was negative. Blood sugar was 100 mg. per hundred cubic centimeters; blood urea, 12 mg. Blood count gave normal results. Hemoglobin was 85 per cent; serum albumin, negative; serum globulin, negative. An electrocardiogram was negative. A roentgenogram of the ankles and feet was negative. Treatment consisted of injection of the superficial varicose veins with 5 per cent sodium morrhuate, resulting in obliteration. The patient was given doses of sodium bicarbonate and potassium citrate, about 600 grains (39 Gm.) of each daily with little improvement. Massage and digitalis were also administered. The patient has seen many physicians without relief. Can you suggest a cause of this "idiopathic edema?" Please print initials only. M.D., New York.

ANSWER.—The causes of bilateral edema of the ankles are many. The correspondent seems to have ruled out cardiac and nephrotic edema by the customary tests. It is not obvious from the description whether the onset of the edema was sudden or gradual. Assuming that the deep veins are patent, the patient may still have short clots in the pelvic vessels, which are not infrequent and may manifest themselves in a mild venous insufficiency. The character and atypical course of the superficial varicosities may give a further hint in this direction. A mild lymphedema, as a result of a chronic obliterating lymphangitis, may be present. This edema is usually harder and produces more fibrosis than any other edema. Finally an increased capillary permeability must be considered, which permits the filtration of protein through the vessel wall. The extravascular protein in turn attracts more water and prevents adequate return on the venous side. In younger women, particularly during the summer, ankle edemas are not uncommon and have been explained on such a basis.

Treatment will naturally be based on the proper diagnosis, which may have to be made by a man who has had considerable experience with such edemas. Generally speaking, the patient should sleep with elevated legs at night and put on a light elastic stocking from the toes to the knees before getting up. Thrombophlebitis and lymphedema respond favorably to mild doses (100 roentgens) of x-rays. If a nephritis can be excluded, the treatment may well begin with daily doses of ammonium nitrate, 1 Gm. three times a day, followed on the third day by 1 cc. of salyrgan intravenously.

Protein-leaking capillaries can be reinforced by calcium, which must be given in large doses, preferably a gram of calcium gluconate intravenously and from 5 to 10 Gm. by mouth.

A return of the edema may be expected so long as the actual cause is unknown.

THERMIC SENSITIVENESS

To the Editor:—A man, aged 34, recently came under my care complaining of intense itching and burning of the skin, involving different areas, sometimes the entire body except the face. He has had this trouble since the age of 13, a period of twenty-one years, and has consulted a number of physicians, none of whom could give him any relief. The trouble is present only during hot weather, at which times it is worse when his body is covered with perspiration. Paradoxically, a bath with warm, cold or tepid water leaves his skin burning intensely for about twenty minutes, after which time he feels relieved. He says it is always more noticeable when the wind blows from the south, bringing cool air of high humidity; that a dry, hot north wind makes him feel more comfortable. A slap on the skin makes that part burn at any time. There has never been any eruption or breaking out that he knows of. The past history is essentially negative, there is no history of allergic diseases, and the trouble does not seem to be related to food. Physical examination reveals ringworm between the thighs, about healed, and a spot of ringworm over the sternum. The urine shows no abnormality, and the blood Wassermann reaction is negative. Can you give me any idea as to what this condition is and how it should be treated? Might it be a neurosis? Please omit name. M.D., Texas.

ANSWER.—This is apparently a case of thermic sensitiveness. The therapeutic approach in cases of this type must be varied. The history indicates that the patient is apparently suffering with a combined—hot and cold—sensitivity. This type of case is extremely hard to manage, and it is necessary to know which tissues are sensitive to heat and which to cold. In some of these cases, heat in one locality may cause reaction and when applied to another may relieve it. The avoidance of undue effort, mental excitement and excessive wearing apparel and the use of fans may ward off an attack in heat sensitive cases. Wetting the hands is sometimes of benefit.

A change in geographic environment is also of benefit, for in this way not only are extremes in temperature avoided but also differences in humidity. Patients whose tissues react locally to heat usually do better in a dry atmosphere than a moist one. If this patient shows a tendency to have a markedly subnormal temperature, the use of desiccated thyroid, insulin or a nonspecific protein therapy may be considered. A higher general average of body temperature is often associated with improvement. The correction of any abnormal body conditions is essential, since these may act as contributory factors. It is remotely possible that the patches of ringworm in this case may be a contributory factor.

Cold sensitive cases usually respond more readily than heat sensitive cases. The use of either hot or cold baths, or their alternate use, may be of benefit. Epinephrine, ephedrine, atropine and sedatives are also of value during the attacks.

DANGERS OF CARBON BLACK

To the Editor:—I have a patient who has worked in the carbon black industry for sixteen months. During the past ten or twelve months he has lost 65 pounds (29.5 Kg.) and is down to his present weight of 135 pounds (61 Kg.). He is 33 years of age and 5 feet 10 inches (178 cm.) in height. I have tried to rule out focal infection and have roentgenographed his chest. The urine is normal. The liver is two fingerbreadths below the costal margin and slightly tender. He complains of general malaise and weakness and some soreness over the right costal margin. He has just come under my observation and doesn't have any fever now but tells me that it has been 101 F. on several occasions and 103 F. one time. He has continued at work until three days ago, when he began his vacation. Please inform me (1) of the hazards of the carbon black industry and the methods of diagnosis, and (2) how the Derrien test for dinitrophenol is carried out.

JAMES F. MCMURRY, M.D., Sentinel, Okla.

ANSWER.—1. Carbon black is made by burning natural gas in a limited supply of air. Two methods are in use, the channel process and the roller process. In the former the flames of burning gas are caused to impinge on inverted iron channels of various lengths, which move slowly forward and backward. In this process about 1,200 cubic feet of gas is burned to produce one pound of the black pigment. In the roller process the burning gas impinges on slowly revolving steel drums and the black pigment is scraped off as it accumulates. This method requires about 1,700 cubic feet of gas to produce one pound of black pigment. Very rarely carbon black is produced by the burning of artificial gas, producer gas, acetylene gas, and so on. Carbon black is almost 100 per cent pure amorphous carbon. Carbon black should not be confused with lamp black, which may be produced by burning coal tar distillates, kerosene, naphtha, fish and vegetable oils, and the like. In the burning of carbon black the possible health hazards are carbon

monoxide poisoning, carbon dioxide asphyxiation and asphyxiation by the natural gas itself, together with the remote possibility of poisoning by sulphur derivatives and by formaldehyde.

2. Derrien's test is performed as follows: To 10 cc. of the urine to be tested add 1 cc. of 10 per cent sulphuric acid and then 1 cc. of 0.5 per cent sodium nitrite solution. Shake and keep in the dark for five minutes. In another tube (of about 25 cc. capacity) place 2 cc. of freshly prepared 0.5 per cent betanaphthol in ammonia water (21.6 per cent NH_3). Pour treated urine into the betanaphthol solution. Shake and allow to stand for one minute or more. Then add 10 cc. of sulphuric ether. Shake well and cork the test tube, permitting the ethereal solution to separate. After separation, interpretation of the test may be made. If the color of the ether is violet, wine or orange red, the reaction is positive for dinitrophenol. If the ether stratum is colorless or yellow, the test is negative.

PNEUMOTHORAX AND THORACOPLASTY

To the Editor:—1. Have most men discontinued the use of pneumothorax after thoracoplasty? If not, on what grounds has it been given up by some? 2. Is puncture of the pleura at its apex a frequent accident when doing a thoracoplasty? Might it be a serious complication? 3. Would the escape of air, in toto, affect the closing of an apical cavity in which otherwise apparent collapse has been obtained? In other words, does moderate intrapleural tension inhibit coughing, further extensions, bronchial dilatation and bronchorrhea? 4. How soon in the average case will coughing and sputum subside after successful collapse? 5. And if the sputum is positive and a cavity visible, would you regard a thoracoplasty as having failed after a year in the face of improved nutrition and strength? 6. How much crippling and deformity are usually associated with operation on the upper five ribs? Please omit name.

M.D., Missouri.

ANSWER.—1. As thoracoplasty is not undertaken in patients in whom artificial pneumothorax can control the condition, it has never been the custom to follow thoracoplasty with a pneumothorax.

2. In a carefully performed operation for artificial pneumothorax, the pleura, as a rule, is not injured. Once in a great while, however, this accident may occur even with the greatest of care. As a rule it is not a serious complication.

3. Moderate intrapleural tension, by which is meant collapse of the lung, might well inhibit coughing. This collapse of the lung, however, should be the result of the thoracoplasty and not of the pneumothorax induced after thoracoplasty. The removal of the intrapleural air is considered by most men an essential step in the operation of thoracoplasty on those patients who have recently had artificial pneumothorax.

4. The subsidence of coughing and sputum depends on so many factors that it is impossible to answer this question with any degree of accuracy.

5. No thoracoplasty can be considered as having resulted in a cure as long as the cavity remains and the sputum is still positive. There are many cases on record in which it has taken more than a year for the sputum to become negative.

6. There should be practically no crippling or deformity, especially when the patient is dressed, after a successful upper stage thoracoplasty.

ARTERIOSCLEROSIS WITH HEMORRHAGES

To the Editor:—Mrs. F. Z. in 1930 (aged 63 then) had an attack of abdominal and thoracic shingles from which she recovered. I saw her in 1930, when she gave a history of having stumbled down stairs some time previously. A few days later she had cloudy vision and tearing. She was confined to her home and to a chair, although she has been able to travel East once. She has high blood pressure, 260 systolic, which has fallen to 200. The urinary examination gave unimportant observations. She is overweight but looks well, eats and sleeps well and has to void urine at least once nightly. Her knees look large but are soft to the touch. Roentgen examination revealed nothing but mild arthritis. She has fallen arches. Neurologic examination by an expert gave negative results. The left tendons were slowed up on my first visit. There are scattered retinal hemorrhages and vision is reduced to 20/200 and unimproved by glasses. Despite all absence of paralysis she says she cannot walk, although she can manage to shuffle for some feet or walk across the room, pushing a chair in front of her. She is mentally alert and has always impressed me as having a hardly noticeable scanning of speech. There are no cardiac murmurs, although her pulse is irregular on occasion. She never has had fresh retinal hemorrhages since 1931. What, in your opinion, may be the cause of her inability or unwillingness to walk? Please omit name.

M.D., California.

ANSWER.—It is evident that the patient is suffering from arteriosclerosis, and it seems probable that she has had hemorrhages not only in the retinas but also in the posterior root ganglions as a cause of the "shingles." Under these circumstances it is at least possible that there have been other minute hemorrhages. The fact that the patient can walk when pushing a chair suggests that the difficulty in walking is not due to loss of muscular power but arises from some defect in equilibration. Nothing is said of dizziness or vertigo, but it seems probable that there is dizziness on assuming the erect posture. The loss of vision is sufficient to give an added sense of insecurity and thus to add an element of fear, which might be regarded as a functional feature. On the whole it seems most probable that there is a combination of disturbance in the vestibular apparatus, possibly the result of hemorrhages, with the element of fear and feeling of insecurity.

SCALENIOTOMY

To the Editor:—Will you kindly give me the technic of scaleniotomy as used in the treatment of pulmonary tuberculosis? Please omit name.

M.D., District of Columbia.

ANSWER.—Under local anesthesia an incision is made between the sternocleidomastoid and trapezius muscles in a skin crease from 2 to 4 cm. above the clavicle, thus exposing the scalenus anticus and medius muscles, with the cervical roots of the brachial plexus between them. The prevertebral fascia is next incised and retracted. While the scalenus anticus muscle is being completely divided at approximately the upper border of the clavicle, the surgeon should carefully protect the subclavian artery, cervical nerve roots and other important structures lying close to the muscle. The cervical roots should then be gently retracted and the broad insertion of the scalenus medius separated from the first rib; the subjacent pleura and one of the roots of the long thoracic nerve, which passes through the substance of the muscle, must be protected. Finally, the surgeon should pass his index finger posteriorly along the first intercostal space and hook and isolate the slender scalenus posticus muscle; this may then be divided with scissors, which are guided by the sense of touch. A review of the anatomy of the field of operation will impress the surgeon with the possibility of accidental operative injury to many important structures during the complete division of the scalene muscles.

INDICATIONS FOR REMOVAL OF APPENDIX

To the Editor:—Will you please inform me as to the safest procedure in caring for a gangrenous appendix, when in the judgment or ability of the surgeon it is deemed wise to leave the appedix in situ. The point I am particularly interested in is, Is it better procedure simply to place a drain or is it wiser to ligate and sever the appendix before inserting the drain? In case the appendix is ligated and left in place, what is likely to happen to it? Does it act in a similar manner to a piece of bowel which is ligated at both ends after being separated from the main bowel?

M.D., Chicago.

ANSWER.—The gangrenous appendix that has perforated is best removed. The same applies to the ruptured gangrenous appendix if the infection is localized to the immediate vicinity of the appendix, if the appendix can be removed without too much manipulation of the intestine, and if the general condition of the patient permits. If a gangrenous appendix has perforated twelve hours or more before the surgeon sees the patient, and generalized peritonitis is present, it is frequently advisable to delay operation until the infection has localized into an abscess. Such an abscess then can be drained without opening the general peritoneal cavity, and the appendix can be removed six or eight weeks later. Obstruction of the lumen of the appendix, particularly if interference with circulation occurs in the region, usually results in perforation of the appendix.

TRANSILLUMINATION OF TESTICLE

To the Editor:—Kindly discuss the value of transillumination of the testicle as a diagnostic procedure in the determination of sterility. Is it of any value? Is it possible by transillumination to determine atrophy of the testicle? Is it possible in this way to determine the cause of the sterility; that is, whether it is due to mumps or to gonorrhea? Please do not publish my name.

M.D., Louisiana.

ANSWER.—The only correct and accurate way to establish the fact of whether the patient is or is not sterile is to collect semen in a condom. This should be examined at once, preferably within thirty minutes after the emission. Transillumination of the testicle as a diagnostic procedure would not appear to have value in this type of case. Mumps is the most frequent cause of atrophy of the testicle. Gonorrhea per se does not affect or involve the testicle. Gonorrhea does involve the epididymis, and in about four out of ten cases occlusion results so that the patient is sterile on the side on which he has epididymitis. Naturally if the patient has had a bilateral attack of epididymitis he stands a four out of ten chance of being sterile. Here again the simple and most accurate way to establish this fact is to examine the ejaculate.

FURUNCULOSIS AMONG WORKERS IN LEAD-SILVER MINE

To the Editor:—Fully 90 per cent of the employees of a lead-silver mine who work on the lower levels of the mine suffer from furunculosis. The temperature on the levels of the mine is moist and always above 100 F. The lower level is approximately at sea level, while the surface is about 3,500 feet above sea level. Most of these boils are small and seem to start in the hair follicles with or without an abrasion of the skin. Usually they are considered of a minor nature but frequently are completely disabling and constitute a disability of considerable economic importance. Treatment with the ingestion of yeast and the use of furunculosis vaccine has given no results. Changing from the lower levels, where sweating is excessive, to other parts of the mine or surface work shows a gradual amelioration of the condition. Can you suggest any treatment that will permit these men to continue their occupation? Please omit name. M.D., Idaho.

ANSWER.—The correct treatment is to render the mine more hygienic by air conditioning. The men will be able to accomplish more and will be more healthy. Such an installation in the Robinson Deep Mine near Johannesburg, South Africa, is described in *Science News Letter*, Aug. 18, 1934.

BRONCHIECTASIS

To the Editor:—I have a patient, a man aged 50, suffering with an advanced bronchiectasis of the right lung. There is no sign of tuberculosis, pneumonoconiosis, tumor or other conditions in the lungs. It seems to me that he has congenital syphilis, although the blood gave a doubtful Wassermann reaction. I would appreciate your suggestion as to the treatment of this case. Please omit name. M.D., New York.

ANSWER.—There is really no satisfactory treatment for bronchiectasis. Syphilis and congenital cystic disease of the lung should be ruled out. Congenital syphilis at the age of 50 is extremely improbable.

Medication is of little use and climate is of only occasional value. Surgical treatment, such as collapse or phrenicectomy, is occasionally made use of but is of uncertain value in the ordinary case.

SANITATION OF GARBAGE

To the Editor:—Kindly furnish me with a list of the diseases that could come from the improper disposal of garbage and the dangers of allowing it to accumulate around the home. Please omit name. M.D., Georgia.

ANSWER.—The accumulation of garbage around the home is objectionable for two reasons: The first is purely an esthetic one: the material is unsightly and will produce bad odors. The second is that garbage may serve as a breeding place for flies. As far as is known, no human diseases are transferred as a result of garbage accumulation. Flies may, of course, convey intestinal diseases such as typhoid when conditions are such that the flies have access to human excreta and to food.

INTRAVENOUS USE OF QUININE

To the Editor:—Can you tell me if there is any marked difference in the action of quinine urea hydrochloride when injected hypodermically than that of other salts of quinine? Does the anesthetic action that follows injection of quinine urea hydrochloride obtain with the other solutions? WILLIAM A. HINCKLE, M.D., Peoria, Ill.

ANSWER.—There is no essential difference excepting in the degree of irritative action. Anesthesia as well as irritation and ultimate sclerosis follows injection of all the quinine salts.

STERILIZATION OF NEEDLES FOR PNEUMOTHORAX

To the Editor:—How long is it necessary to boil 16 to 18 gage needles to sterilize them for pneumothorax treatments and aspirations? Please omit name. M.D., New York.

ANSWER.—Boiling 16 to 18 gage needles for ten minutes will safely sterilize them for any purpose.

SAFETY OF NORMAL DELIVERY AFTER CESAREAN SECTION

To the Editor:—In Queries and Minor notes in THE JOURNAL, November 10, page 1470, there is an answer to a query as to the safety of normal delivery after cesarean section. The answer given, while covering many factors, omitted one factor that is probably as important as is the alleged superiority of the lower uterine segment operation; namely, the location of the placental site: if the placental site is anterior, the danger of pregnancy and labor is greater than otherwise.

W. F. HEWITT, M.D., Chicago.

Council on Medical Education and Hospitals

COMING EXAMINATIONS

ALABAMA: Montgomery, Jan. 7. Sec., Dr. J. N. Baker, 519 Dexter Ave., Montgomery.

AMERICAN BOARD OF DERMATOLOGY AND SYPHILOLOGY: *Written (Group B candidates).* The examination will be held in various cities throughout the country, April 29. *Oral (Group A and Group B candidates).* New York, June 10. Sec., Dr. C. Guy Lane, 416 Marlborough St., Boston.

AMERICAN BOARD OF OBSTETRICS AND GYNECOLOGY: *Written (Group B candidates).* The examination will be held in various cities of the United States and Canada, March 23. *Final oral and clinical examination (Group A and Group B candidates).* Atlantic City, N. J., June 10-11. Group B application lists close Feb. 23 and Group A application lists close May 10. Sec., Dr. Paul Titus, 1015 Highland Bldg., Pittsburgh.

AMERICAN BOARD OF OPHTHALMOLOGY: Philadelphia, June 10. *Application must be filed at least sixty days prior to date of examination.* Sec., Dr. William H. Wilder, 122 S. Michigan Blvd., Chicago.

AMERICAN BOARD OF OTOLARYNGOLOGY: New York, June 8. Sec., Dr. W. P. Wherry, 1500 Medical Arts Bldg., Omaha.

ARIZONA: Phoenix, Jan. 2-3. Sec., Dr. J. H. Patterson, 320 Security Bldg., Phoenix.

CALIFORNIA: *Reciprocity.* San Francisco, Jan. 16. *Regular.* Los Angeles, Feb. 4-7. Sec., Dr. Charles B. Pinkham, 420 State Office Building, Sacramento.

COLORADO: Denver, Jan. 18. Sec., Dr. Wm. Whitridge Williams, 422 State Office Bldg., Denver.

CONNECTICUT: *Basic Science.* New Haven, Feb. 9. *Prerequisite to license examination.* Address, State Board of Healing Arts, 1895 Yale Station, New Haven.

DISTRICT OF COLUMBIA: Washington, Jan. 14-15. Sec., Commission on Licensure, Dr. W. C. Fowler, 203 District Bldg., Washington.

ILLINOIS: Chicago, Jan. 22-24. Superintendent of Registration, Department of Registration and Education, Mr. Eugene R. Schwartz, Springfield.

IOWA: Des Moines, Jan. 3-5. Dir., Division of Licensure and Registration, Mr. H. W. Grefe, Capitol Bldg., Des Moines.

MINNESOTA: *Basic Science.* Minneapolis, Jan. 2-3. Sec., Dr. J. Charnley McKinley, 126 Millard Hall, University of Minnesota, Minneapolis. *Medical.* Minneapolis, Jan. 15-17. Sec., Dr. E. J. Engberg, 350 St. Peter St., St. Paul.

NATIONAL BOARD OF MEDICAL EXAMINERS: *Parts I and II.* The examinations will be held in medical centers where there are five or more candidates, Feb. 13-15. Ex. Sec., Mr. Everett S. Elwood, 225 S. 15th St., Philadelphia.

NEBRASKA: *Basic Science.* Omaha, Jan. 8-9. Dir., Bureau of Examining Boards, Mrs. Clark Perkins, State House, Lincoln.

NEVADA: *Reciprocity.* Feb. 4. Sec., Dr. Edward E. Hamer, Carson City.

NEW YORK: Albany, Buffalo, New York and Syracuse, Jan. 28-31. Chief, Professional Examinations Bureau, Mr. Herbert J. Hamilton, Room 315 Education Bldg., Albany.

NORTH DAKOTA: Grand Forks, Jan. 1-4. Sec., Dr. G. M. Williamson, 4½ S. 3d St., Grand Forks.

OREGON: Portland, Jan. 2-4. Sec., Dr. Joseph F. Wood, 509 Selling Bldg., Portland.

PENNSYLVANIA: Philadelphia, Jan. 8-12. Dir., Bureau of Professional Licensing, Mr. W. M. Denison, 400 Education Bldg., Harrisburg.

RHODE ISLAND: Providence, Jan. 3-4. Dir., Public Health Commission, Dr. Lester A. Round, 319 State Office Bldg., Providence.

SOUTH DAKOTA: Pierre, Jan. 15-16. Dir., Division of Medical Licensure, Dr. Park B. Jenkins, Pierre.

VERMONT: BURLINGTON, Feb. 13-15. Sec., Board of Medical Registration, Dr. W. Scott Nay, Underhill.

WASHINGTON: *Basic Science.* Seattle, Jan. 10-11. *Medical.* Seattle, Jan. 14-16. Dir., Department of Licenses, Mr. Harry C. Huse, Olympia.

WISCONSIN: Madison, Jan. 8-10. Sec., Dr. Robert E. Flynn, 401 Main St., LaCrosse.

WYOMING: Cheyenne, Feb. 4. Sec., Dr. W. H. Hassed, Capitol Bldg., Cheyenne.

Rhode Island July Examination

Dr. Lester A. Round, director, Public Health Commission, reports the written and practical examination held in Providence, July 5-6, 1934. The examination covered 7 subjects and included 70 questions. An average of 80 per cent was required to pass. Twelve candidates were examined, 11 of whom passed and 1 failed. The following schools were represented:

School	PASSED	Year Grad.	Per Cent
Georgetown University School of Medicine		(1933)	89.9
Harvard University Medical School		(1932)	88.5, 89.9
Tufts College Medical School		(1931)	88.5, (1932) 80.9
St. Louis University School of Medicine		(1934)	86.9*
Hahnemann Med. College and Hospital of Philadephia		(1933)	89.7, 92.3
Jefferson Medical College of Philadelphia		(1934)	88.5*
McGill University Faculty of Medicine		(1933)	91.9
University of Montreal Faculty of Medicine		(1934)	80

School	FAILED	Year Grad.	Per Cent
Universidade de Lisboa Faculdade de Medicina, Portugal		(1932)	74.6

*License withheld pending completion of internship.

V 1 193

South Carolina June Examination

Dr. A. Earle Boozer, secretary, State Board of Medical Examiners, reports the written examination held in Columbia, June 26-28, 1934. The examination covered 17 subjects and included 70 questions. An average of 75 per cent was required to pass. Forty candidates were examined, all of whom passed. The following schools were represented:

School	PASSED	Year Grad.	Per Cent
University of Arkansas School of Medicine		(1927)	82.4
University of Michigan Medical School		(1934)	90.3
University of Oklahoma School of Medicine		(1930)	80.5
Jefferson Medical College of Philadelphia		(1934)	83.1
Medical College of the State of South Carolina		(1933) (1934)	80.9, 79.4, 80.5, 80.6, 80.6, 80.8, 81.3, 81.4, 82.1, 82.3, 82.4, 82.4, 82.9, 83.3, 83.5, 84, 84.9, 85, 85, 85, 85.4, 86.1, 86.3, 86.5, 86.6, 86.8, 87.1, 87.5
Meharry Medical College		(1933)	75, 82.1, (1934) 80.5
University of Tennessee College of Medicine		(1933)	83.9
Vanderbilt University School of Medicine		(1933)	86.1
Medical College of Virginia		(1934)	83, 84.4, 85.8

Five physicians were licensed by reciprocity from May 2 to July 10. The following schools were represented:

School	LICENSED BY RECIPROCITY	Year Grad.	Reciprocity with
Birmingham Medical College		(1912)	Alabama
Emory University School of Medicine		(1923)	Georgia
University of Georgia Medical Department		(1900), (1932)	Georgia
Washington University School of Medicine		(1929)	N. Carolina

Virginia June Examination

Dr. J. W. Preston, secretary, Board of Medical Examiners, reports the written examination held in Richmond, June 20-22, 1934. The examination covered 9 subjects and included 90 questions. An average of 75 per cent was required to pass. One hundred and twenty-five candidates were examined, 122 of whom passed and 3 failed. The following schools were represented:

School	PASSED	Year Grad.	Number Passed
George Washington University School of Medicine		(1933)	1
Georgetown University School of Medicine		(1933)	1
Howard University College of Medicine		(1933, 4), (1934)	5
Emory University School of Medicine		(1934)	1
Eclectic Medical College, Ohio		(1927)	1
University of Pennsylvania School of Medicine		(1934)	1
Medical College of Virginia		(1933), (1934, 59)	60
Univ. of Virginia Dept. of Med.		(1930), (1933), (1934, 48)	50
Osteopaths			2

School	FAILED	Year Grad.	Number Failed
Howard University College of Medicine		(1932), (1934)	2
Medical College of Virginia		(1934)	1

Eighteen physicians were licensed by reciprocity and 1 physician was licensed by endorsement from January 12 to August 15. The following schools were represented:

School	LICENSED BY RECIPROCITY	Year Grad.	Reciprocity with
George Washington University School of Medicine		(1931) (1932)	Dist. Colum., Maryland
Georgetown University School of Medicine		(1928), (1931)	Dist. Colum.
Rush Medical College		(1930)	Illinois
Tulane University of Louisiana Medical Department		(1899)	Louisiana
Tulane University of Louisiana School of Medicine		(1927)	N. Carolina
College of Physicians and Surgeons of Baltimore		(1912)	Maryland
Johns Hopkins University School of Medicine		(1932)	Maryland
University of Maryland School of Medicine and College of Physicians and Surgeons		(1926)	Maryland
Columbia Univ. College of Physicians and Surgeons		(1925)	Tennessee
Hahnemann Medical College and Hosp. of Philadelphia		(1924) (1932)	Penna., Maryland
University of Pennsylvania School of Medicine		(1931)	N. Carolina
Meharry Medical College		(1932)	Tennessee
University of Tennessee College of Medicine		(1931)	Tennessee
Medical College of Virginia		(1917)	N. Carolina
University of Toronto Faculty of Medicine		(1925)	Maryland

School	LICENSED BY ENDORSEMENT	Year Grad.	Endorsement of
Yale University School of Medicine		(1918)	U. S. Navy

Tennessee March Examination

Dr. H. W. Qualls, secretary, Tennessee State Board of Medical Examiners, reports the written examination held in Memphis, March 26-27, 1934. The examination covered 8 subjects and included 80 questions. An average of 75 per cent was required to pass. Twenty-four candidates were examined, all of whom passed. The following schools were represented:

School	PASSED	Year Grad.	Number Passed
Howard University College of Medicine		(1931, 2)	2
Tulane University of Louisiana School of Medicine		(1932)	1
Harvard University Medical School		(1929)	1
University of Tennessee College of Medicine		(1934, 20)	20

Book Notices

Electrocardiography. By Chauncey C. Maher, B.S., M.D., Assistant Professor of Medicine, Northwestern University and the Montgomery Ward Medical Clinics. Cloth. Price, $4. Pp. 250, with 145 illustrations. Baltimore: William Wood & Company, 1934.

This is "a treatise on electrocardiography, for use by the general practitioner, the medical student, and the specialist exclusive of the cardiologist." There is only one reference to significant literature; "extensive bibliography may be readily found elsewhere." Certain statements are contrary to the experience of other clinicians and at variance with the commonly accepted views in this field of research. "Rheumatic mitral stenosis does not occur in the heart with syphilitic aortitis." "The rhythm" in paroxysmal auricular tachycardia "is strikingly regular . . . This point may successfully differentiate it from auricular flutter, simple sinus tachycardia, or ventricular flutter. Auricular flutter usually occurs as a paroxysm of tachycardia. . . . The chronic form is uncommon." Apparently the author does not consider circus movement the mechanism underlying auricular flutter and fibrillation of the auricles and ventricles. "The mechanism of auricular flutter is relatively simple. . . . The sino-auricular node has lost its rôle as pacemaker to a focus in the auricular musculature . . . This ectopic focus emits stimuli to contraction at a rate of 300 to 400 per minute. . . . In auricular fibrillation, the site of impulse initiation has left the sinus node and is replaced by multiple foci in the auricular musculature . . . Each single focus sends out stimuli at a rapid rate as in . . . auricular flutter. . . . These foci cause localized contraction waves of the auricular muscle which interfere with one another. . . . In auricular fibrillation, in the auricles, there are multiple foci, each rhythmically issuing stimuli constantly interfering with one another." Regarding the mechanism responsible for ventricular fibrillation, he states that "numerous ectopic foci in the ventricles emit stimuli." Ventricular flutter, according to Lewis, is "a condition at present undefined." According to the author, "this mechanism has been termed ventricular tachycardia, which is really a misnomer. . . . Ventricular tachycardia or more technically ventricular flutter . . . Ventricular flutter is essentially a regular succession of extrasystoles arising from an ectopic focus in the ventricular muscle." The diagram illustrating the condition is typical of graphs authoritatively accepted as representing paroxysmal ventricular tachycardia. The fact that the level in the auriculoventricular node from which impulses arise alters the relationship of the P wave to the QRS complex is not mentioned. Perhaps, as a result, a condition is described as "a permanent mechanism known as Ectopic Auricular Rhythm in contradistinction to the paroxysmal type, which is much faster." The figure and electrocardiogram presented represent a nodal rhythm arising from the upper portion of the auriculoventricular node; duplicates, so interpreted, have been published by Lewis. These and other questionable or loosely worded statements tend to confuse the beginner having access to other sources of information. This is unfortunate, since diagrams and electrocardiograms, well prepared and carefully selected as are most of these, serve as a valuable aid to the novice. Chapter 8, on axis deviation, is especially well presented. Perhaps this and chapter 12, on the routine interpretation of electrocardiograms, could have been introduced earlier in this presentation.

Problèmes actuels de pathologie médicale. Par A. Clerc, professeur à la Faculté de médecine de Paris, et autres. Troisième série. Cours complémentaire de la Faculté de médecine. Paper. Price, 45 francs. Pp. 339, with illustrations. Paris: Masson & Cie, 1934.

This is the third of the series dealing with pathologic changes in the various medical conditions. The series is edited by Professor Clerc with the assistance of eleven contributors. The subjects discussed are cardiac investigations during the course of diabetes mellitus; disturbed rhythm of the heart in acute infectious myocarditis; parotid sinus; polymorphism and changes produced by Trichocephalus and in Lamblia organisms; delayed hereditary syphilis; hematemesis of splenic origin; primary benign inflammatory purpuras; malignant forms of complete arrythmias; gastric syphilis; cardiac rhythm with pulsus trigeminus; pulmonary complications in grip, and acute

hepatonephritis. The authors discuss these subjects from the pathologic-physiologic standpoints and interpret the clinical changes on these bases. All the subjects are of interest.

Paul Chevalier, who has written the chapter on purpura, has gotten away from the conventional classification and textbook description of this disease and bases the treatment of the subject on his clinical experience and evidence he has obtained from biopsy of purpuric lesions. He concedes that purpura may be a symptom or a disease. In either case the underlying basis for its causation is essentially vascular. He divides purpuras into the simple acute inflammatory purpuras and into the simple chronic types. Under the acute types, the rheumatoid type occupies most of the discussion. He takes up the various types of syndromes that may be seen under this heading; for example, the joint, abdominal, renal and cutaneous manifestations. He discusses the opinions of various authors in regard to the pathogenesis of purpura but concludes that their facts are inconclusive when attempting to explain clinical forms. Under the discussion of pathology of purpura he offers histologic proof for the inflammatory nature of the purpuric lesion. In both acute and chronic types he finds abundant perivascular infiltration. Under the heading of "chronic purpura" he describes hemogenia as an endothelial plasmatic dyscrasia; in other words, the association of a capillary fragility with a humoral disturbance without local perivascular inflammatory changes. This is undoubtedly comparable to essential thrombocytopenia (Werlhof's disease). He cautions that in many instances cases which really belong under the clinical inflammatory purpuras have been erroneously put into this group. While the author's discussion differs materially from the conventional treatment of the subject of purpura, it is stimulating and contains enough clinical evidence to justify serious consideration.

Mental Defect. By Lionel S. Penrose, M.A., M.D., Research Medical Officer, Royal Eastern Counties Institution, Colchester. Cloth. Price, $2.50. Pp. 205, with 9 illustrations. New York: Farrar & Rinehart, Inc., 1934.

It has been several years since the publication of the previous good book on mental deficiency. Several monumental works have come out in new editions, but the present volume is the first work that incorporates many of the newer ideas on the subject. Its point of view is somewhat different from that of previous works in that it stresses the general considerations of feeblemindedness rather than specific types, such as mongolism and cretinism. Its contents can be roughly divided into four parts. The first five chapters contain a short summary of the history of mental abnormality, and systematic investigation, such as the physical examination, physical measurements, laboratory observations and the psychologic examination. The next two chapters discuss the methods of collecting facts from the history and the methods of dealing with these facts. The eighth chapter is an excellent discussion of classification—a subject that is never in a static state. The author is willing to present the various classifications and give some discussion of the merits of each. With the exception of the last chapters, the remainder of the book deals with pathologic types. Mongolism, birth injury and cerebral inflammation are stressed. Although the subject of feeblemindedness is one of great significance in criminology, the matter is passed over in a page. Two chapters on treatment are given, one of which is a summary of the results of the White House Conference on the Handicapped Child. Those who have had to work with the feebleminded will have much to criticize in the individual chapters dealing with their special interests; for example, the chapter on psychologic tests is simply a schedule of a few available tests. The significance of the Binet scale is not stressed, yet it is probably the greatest single step investigators have made available for classifying, studying and treating defective cases. In the chapter on treatment in the United States, the book takes an entirely different point of view. The earlier parts emphasize particularly valuable recent researches, but this chapter is a mere summary of the reports made at the White House conference. This is unfortunate, for medical practitioners would be interested in therapy carried out in this country by Clark, Beaman, Svendsen and others rather than attitudes toward the social care of defectives. These attitudes are important but are given a place in their proper proportion in the general chapter on treatment. Throughout the book the best authorities are cited and properly annotated, The most serious general criticism that can be made arises from the fact that it is too broad in its treatment of the subject for the amount of space allotted. Chapters dealing with important disease entities are short and offer only a modicum of the knowledge available on that subject. Too, the author must have been delayed in his publication, for in the last few years, particularly in America, many significant additions have been made to our knowledge of the subject of feeblemindedness. The book can be recommended as an excellent general introduction to the field to which it is devoted, but much criticism will arise from experts on mental defects in America because of its scanty treatment of important subjects. It is insufficiently specific in dealing with pathology, symptomatology and treatment to be valuable as a medical textbook in feeblemindedness. It must be remembered, too, that the medicolegal considerations are British rather than American.

Nutrition and Diet Therapy: A Textbook of Dietetics. By Fairfax T. Proudfit, Instructor in Nutrition and Diet Therapy, University of Tennessee, College of Medicine & College of Dentistry. Sixth edition. Fabrikold. Price, $2.75. Pp. 834, with illustrations. New York: Macmillan Company, 1934.

This completely revised edition, including several new chapters, presents latest methods of teaching the fundamental principles of nutrition in health and disease as approved by the American Dietetic Association and the American League of Nursing Education. The text follows the approved outline of courses in Dietetics for Nurses published by the American Dietetic Association (revised edition, 1933). Normal nutrition is stressed throughout. Pathologic conditions are so described as to give the student nurse a good understanding of the relationship between the physician's diet orders and the symptoms of the patient and laboratory reports on his condition. The revisions in this edition are chiefly the result of extended experience in teaching nutrition and diet in disease to nurses and students of dental hygiene, medicine and dentistry. The laboratory class work includes preliminary lessons on the foods to be prepared, their place in the diet, and substitutes for varying the menu. Part I of the book treats of normal nutrition or foods in health. Part II discusses the planning of hospital and family dietaries and methods of feeding in normal and abnormal conditions and presents pertinent information on the main classes of foods. Part III is devoted to the use of food in the nutrition of the sick, including physiologic information, symptoms and special diets. Part IV covers the preparation of foods. The appendix includes the usual tables on food composition. This is a valuable textbook and ready reference work for nurses and dietitians.

Clinical Toxicology: Modern Methods in the Diagnosis and Treatment of Poisoning. By Erich Leschke, Professor of Internal Medicine in the University of Berlin. Incorporating Material on Industrial Poisoning by Franz Koelsch, Director of the Bavarian Institute for Industrial Medicine, and with two Appendices: I. The Prevention and Compensation of Industrial Poisoning. By Franz Koelsch. II. The Detection of Poisoning, Post Mortem. By Karl Meixner, Professor of Forensic Medicine, Innsbruck. Translated by C. P. Stewart, M.Sc., Ph.D., Lecturer in General Biochemistry, University of Edinburgh, and O. Dorrer, Ph.D., Research Assistant to Professor Wieland, Munich. The Gloucester Series. Cloth. Price, $5. Pp. 346, with 25 illustrations. Baltimore: William Wood & Company, 1934.

Murrell's What to do in Cases of Poisoning. By P. Hamill, M.D., D.Sc., F.R.C.P., Lecturer on Pharmacology and Therapeutics, St. Bartholomew's Hospital Medical College. Fourteenth edition of "What to Do in Cases of Poisoning" by Dr. W. Murrell. Cloth. Price, $1.50. Pp. 208. New York: Paul B. Hoeber, Inc., 1934.

The English translation of Erich Leschke's book is welcome, for this work marks a new departure in toxicology. It and Ludwig Popper's "Klinik und Therapie akuter Vergiftungen," which was published about the same time last year, treat toxicology as a clinical subject, the result of experience at the bedside. This gives these books an entirely different aspect from the older textbooks on toxicology, of which Murrell's is a type, that have been written not by clinicians but by pharmacologists.

Murrell's little book, even though it aims at being highly practical, starting as it does with "If sent for to a case of poisoning go at once—the patient's life may depend on your prompt attendance," is yet largely theoretical. One has the feeling that the author has not seen or treated many cases of poisoning and that nearly all of what he has to say is second

hand knowledge, neatly arranged and systematized for the student's benefit and for ready reference in case one has the misfortune of being face to face with a case of poisoning, so that one may at least do no harm. It is written impersonally and leaves one cold.

Leschke's book breathes an entirely different spirit. One feels the throb of the real thing when one reads: "Whoever sat up, through the night, with a case of poisoning, whoever has experienced the excitement and care involved in bringing the patient back to life, whoever has busied himself for hours with artificial respiration, stomach pumps, and injections, whoever has felt the despair of the relatives and his own depression at failure if treatment failed or the joy and gratitude if it succeeded . . ." This book has been written "from the standpoint of the practicing physician for the benefit of the physician," just as Murrell's book has been written by a student for the benefit of the student.

Both books have their place and mission. However, one cannot help realizing that in the direction of "clinical toxicology" lies the road to real advance in the diagnosis and treatment of poisoning in man. It is to be hoped that in the future with such models as Leschke's, poisoning will no longer be the "Cinderella in clinical teaching and in the further studies of qualified physicians." With this there will come not only an improvement in the diagnosis of poisoning cases, which according to Zangger is wrong in up to 80 per cent of cases, at least at the beginning, but also a greater efficiency in the therapy, which in all probability is not the best possible one in a still larger proportion of cases.

Franklin Paine Mall: The Story of a Mind. By Florence Rena Sabin. Cloth. Price, $2.75. Pp. 342, with 8 illustrations. Baltimore: Johns Hopkins Press, 1934.

The writer of this volume worked for twenty years in association with the subject of the sketch. In the development of the biography Mrs. Mall and Dr. W. H. Welch helped greatly, as did also Drs. Simon Flexner and George L. Streeter. Medical men who studied their embryology with Mall at Johns Hopkins will find this book of special interest, but as a biography of a great teacher, written *con amore*, it will be attractive to all. In an appendix there are bibliographies and reproductions of correspondence referred to in the text. There are some minor errors in the names of persons and particularly the confusion of several middle initials which might easily have been avoided, for example, Frank S. Billings and James B. Angell.

The Inheritance of Resistance to Bacterial Infection in Animal Species: A Review of the Published Experimental Data. By A. Bradford Hill. Medical Research Council, Special Report Series, No. 196. Paper. Price, 1s. 3d. Pp. 71, with 2 illustrations. London: His Majesty's Stationery Office, 1934.

This report, prepared under the direction of the Statistical Committee of the Medical Research Council, consists of an able and critical review of the results of the experimental investigations dealing with the problems of inheritance of resistance or immunity to bacterial infection. The difficulties inherent in work of this kind are emphasized. The report will be of service in the planning of further investigations in its field.

Mental Deficiency Nursing (Simplified). By O. P. Napier Pearn, M.R.C.S., L.R.C.P., D.P.M., Deputy Medical Superintendent, Cane Hill Mental Hospital. Cloth. Price, $2. Pp. 281, with 22 illustrations. Baltimore: William Wood & Company, 1934.

The problem of securing adequate attendants for the feebleminded seems to be as great in Great Britain as it is in this country. In America a strong back and a weak mind seem in many cases to be adequate qualifications for an attendant for mental defectives. Little effort is made in many institutions to train such people, for it is felt that a few adequately trained supervisors will prevent serious consequences from the insufficient mental equipment of attendants. The present work indicates clearly that little more is expected in England in the way of cerebral equipment than is expected here. It is necessary that two-syllable words be divided by hyphens into their component parts in order that they may be intelligible to the English mental deficiency nurse. The book contains summaries of all of medicine, including nursing and hygiene, and a discussion of mental deficiency. Apparently the potential readers are expected to give hypodermic injections and perform all the duties of a registered nurse, even though the style in which the book is written indicates their incompetence to do so. For the nurse who is otherwise adequate, several chapters (particularly those on mental deficiency) should be of value, because of the fact that the symptoms and characteristics of mental deficiency are carefully outlined and defined; but the curious mixture of intense simplification and highly technical knowledge which the author brought together makes one wonder for whom the book is really adequate—it is too simple for the real nurse and too technical for the stupid attendant. The chapter on nursing and training of mental defectives is not long and is really only an outline rather than a practical guide; yet it should be a guide if the title of the book is not a misnomer. Since it is the first book of its kind, it undoubtedly will serve the purpose of stimulation; but as far as America is concerned a different book for training attendants for the feebleminded will need to be written. The chapters on how to study, and questions for review, are suggestive that this is a book for "cramming" rather than for education.

The Technique of Contraception: An Outline. By Eric M. Matsner, M.D. Foreword by Robert L. Dickinson, M.D. Introduction by Foster Kennedy, M.D. Published for the American Birth Control League, Inc. Second edition. Paper. Price, 50 cents. Pp. 38, with 32 illustrations. Baltimore: Williams & Wilkins Company, 1934.

This review of the technic of contraception will probably be in considerable demand, combining as it does, in the space of forty pages, a discussion of many different methods of birth control. The author divides them into practical methods, unpractical methods, and methods requiring further experimental and developmental research. Diagrams accompany the article and greatly clarify the directions for the use of various contraceptive methods.

Community Hygiene: A Text Book in the Control of Communicable Diseases. By Laurence B. Chenoweth, A.B., M.D., Professor of Hygiene and Director of the Students' Health Service of the University of Cincinnati, and Whitelaw Reid Morrison, A.M., M.D., Professor of Hygiene and Physical Education, and Director of the Men's Gymnasium in Oberlin College. Cloth. Price, $2.50. Pp. 317, with 112 illustrations. New York: F. S. Crofts & Company, 1934.

It would seem that there are enough textbooks on community hygiene without adding any more, and yet this volume makes an instant appeal because of the comprehensiveness of its scope, the clarity and conciseness with which the subtopics are handled, and the logical organization. The book is well and profusely illustrated and the chapter bibliographies are particular good. It has a good glossary and an adequate index.

Sex Education: Facts and Attitudes. By Various Contributors. Paper. Price, 25 cents. Pp. 59. New York: Child Study Association of America, 1934.

This pamphlet is a collection of articles by a number of different authors, reprinted from various magazines. It is described in the introduction as a pamphlet addressed to parents and designed to offer "not a ready-made philosophy of sex and sex education, but rather suggestions and guidance to the mature parent in search of his own philosophy." Written as these articles are by experienced specialists, they contain many important suggestions but, unfortunately, are couched in terms that will limit their usefulness to individuals familiar with the thought trends and the terminology of modern psychology and education. For the great mass of parents they will not be of much help, because they are written in terms which only the specialist will be likely to find comprehensible.

The Human Machine: Its Uses and Abuses. By Lorena M. Breed, M.D., F.A.C.P. Cloth. Price, $1.50. Pp. 101. Boston: The Stratford Company, 1934.

Comparison of the human body with the machine has of late years been regarded by health educators not only as trite but not particularly apropos. The modern concept of the machine as a standardized mechanism with interchangeable, replaceable parts does not convey a happy picture of the human body, which is in no sense standardized, has no replaceable parts, and is subject to influences of a psychic and emotional character that have no place in a machine. However, for those who like the mechanistic conception, this book utilizes it probably to its

best advantage. With so many books available dealing with hygiene, it does not appear that this swift and superficial survey will contribute anything new or valuable. Greatest emphasis is placed on diet. Sanitarians and dietitians alike will deplore the author's apparent insistence on raw milk in preference to pasteurized. A misprint confuses vitamin C with vitamin D in one place, and this might confuse the superficial reader. In general, the hygienic advice given is perfectly sound and yet the book leaves the reader unsatisfied, because it has skimmed too lightly the surface of the subject.

Medicolegal

Autopsy: Consent of Surviving Spouse Bar to Suit by Child.—The defendant company issued two policies of insurance payable in case of the accidental death of Webber, one to his wife and one to his executors, administrators or assigns. Each policy contained a provision reading, in part, as follows:

> The Company shall have the right and opportunity . . . to make an autopsy in case of death where it is not forbidden by law.

Webber died under circumstances that made it questionable whether his death was or was not accidental. About a month later, at the instance of an investigator for the defendant, the widow gave written consent to an autopsy of Webber's body. Thereafter the body was disinterred and an autopsy performed over the objection of the plaintiff, an adult daughter of Webber. Alleging that the defendant had no right to disinter the body of her father and to perform an autopsy on it without her consent, she sued the defendant in the United States district court, eastern district, Illinois. A judgment was given for the plaintiff, and the insurance company appealed to the circuit court of appeals, seventh circuit.

Since the policies authorized the insurance company to make an autopsy only "where it is not forbidden by law," the plaintiff contended that the autopsy was not within the terms of the policy because disinterment was unlawful. Smith-Hurd Illinois Revised Statutes, 1933, c. 38, sec. 354, she pointed out, makes it unlawful for anyone *wilfully and without authority* to dig up, disinter, remove or convey away from the place of sepulture or interment any human body. This statute, said the circuit court of appeals, is directed against grave robbing or otherwise wilfully and without authority disinterring a body. With the widow's consent to the autopsy, there was an entire absence of wilfulness on the part of the insurance company. The court held also that there was "authority" for making the disinterment. While the statute does not indicate the nature of the necessary "authority," it seems to be recognized in Illinois that one may make testamentary disposition of his own body. If one may do this by will, the court could see no lawful objection to one's doing it by contract, as Webber had done. That such an agreement is consonant with public policy is manifested by the fact that such a provision is required by statute to be incorporated in accident policies issued in Illinois. Doubtless an insurance company, if it exercises its right to have an autopsy performed, should arrange for the autopsy within a reasonable time after death, but no question as to the seasonableness of the performance of the autopsy has been presented in this case.

In this case, continued the court, there was specific consent and authorization by the widow and beneficiary, given after the burial, to make the autopsy, which necessarily implied consent to the disinterment. The trend of the authorities is that, apart from testamentary disposition or of special circumstances which may dictate otherwise, a surviving spouse has full authority over the disposition of the deceased as against the next of kin. The court accordingly held that the right to consent to the disinterment and autopsy was vested wholly in the widow and to no extent in the plaintiff, and that the disinterment and autopsy without the consent of decedent's daughter, the plaintiff, gave her no cause of action. The judgment of the trial court in favor of the plaintiff was reversed.—*Aetna Life Ins. Co. v. Lindsay, 69 F. (2d) 627.*

Workmen's Compensation Acts: Perforation of Ulcer of the Stomach.—In the course of his employment, Almquist was required to "pull up and shake out" barberry bushes. Two or more bushes sometimes would be bunched together with a clump of dirt weighing up to 250 pounds, and the workman would then pull the bushes apart by hand or pry them apart with a spade. While so engaged, he collapsed, evidencing distress in the abdomen. His attending physician, on operating, discovered that an ulcer of the stomach had perforated and that the contents of the stomach had emptied into the abdominal cavity. The workman died about six weeks later from "an empyema" due to "pus forming after a complication of perforation" of an ulcer. His widow instituted proceedings under the workmen's compensation act of Iowa. She was denied compensation by a deputy industrial commissioner, whose action was affirmed by the industrial commissioner. On appeal, the district court of Page County reversed the decision of the industrial commissioner and awarded compensation. The employer and his insurance carrier then appealed to the Supreme Court of Iowa.

In denying compensation, the commissioner stated that "the record utterly fails to show . . . there was anything in the nature of accident or incident out of the ordinary." From this statement, said the Supreme Court, it is apparent that the commissioner held as a matter of law that the widow could not receive compensation unless she proved that the injury arose out of an accident or unusual incident. But the compensation act only requires, in effect, that the disability be due to a "personal injury." A "personal injury," continued the court, obviously means an "injury to the body, the impairment of health, or a disease, not excluded by the act, which comes about, not through the natural building up and tearing down of the human body, but because of a traumatic or other hurt or damage to the health or body of an employee. . . . The injury to the human body here contemplated must be something, whether an accident or not, that acts extraneously to the natural processes of nature, and thereby impairs the health, overcomes, injures, interrupts, or destroys some function of the body, or otherwise damages or injures a part or all of the body." In the present case, observed the court, the workman's employment was exceedingly heavy, requiring much lifting, pulling and prying, thereby causing a straining of the stomach. The workman's physician testified that there would have been no perforation had it not been for the strain of the work, and there was no evidence to the contrary. The death in this case, concluded the court, was due to a "personal injury" within the meaning of the compensation act.

However, the court reversed that part of the judgment of the district court which awarded $318 for medical expenses. Section 1387, Iowa Code, 1931, provides in part as follows: "The employer, if so requested by the employee, or any one for him, or if so ordered by the court or industrial commissioner, shall furnish reasonable surgical, medical, and hospital services, and supplies therefor." Medical services, said the court, are to be paid for by the employer and his insurer only under the terms of the statute. If the terms of the statute have not been met, courts cannot order the payment. Here there was no showing that medical services had been requested of the employer, or that a court or the commissioner had ordered such services. To the extent that these medical expenses were allowed, the Supreme Court modified the judgment of the district court awarding compensation to the widow.—*Almquist v. Shenandoah Nurseries, Inc. (Iowa), 254 N. W. 35.*

Society Proceedings

COMING MEETINGS

American Academy of Orthopedic Surgeons, New York, Jan. 14-16. Dr. Philip Lewin, 104 South Michigan Boulevard, Chicago, Secretary.

American Orthopsychiatric Association, New York, Feb. 21-23. Dr. Mary A. Claude, 41 East 57th Street, New York, Secretary.

Annual Congress on Medical Education and Licensure, Chicago, Feb. 18-19. Dr. William D. Cutter, 535 North Dearborn Street, Chicago, Secretary.

Pacific Coast Surgical Association, Santa Barbara, Calif., Feb. 21-23. Dr. Edgar L. Gilcreest, 384 Post Street, San Francisco, Secretary.

Current Medical Literature

AMERICAN

The Association library lends periodicals to Fellows of the Association and to individual subscribers to THE JOURNAL in continental United States and Canada for a period of three days. Periodicals are available from 1925 to date. Requests for issues of earlier date cannot be filled. Requests should be accompanied by stamps to cover postage (6 cents if one and 12 cents if two periodicals are requested). Periodicals published by the American Medical Association are not available for lending but may be supplied on purchase order. Reprints as a rule are the property of authors and can be obtained for permanent possession only from them.

Titles marked with an asterisk (*) are abstracted below.

American J. Digestive Diseases and Nutrition, Chicago

1: 537-608 (Oct.) 1934

Histologic Study of Liver in Patients Affected with Peptic Ulcer. M. A. Schnitker and G. M. Hass, Boston.—p. 537.
*Effects of Desiccated Hog's Stomach in Achlorhydria. L. Schiff and Toba Tahl, Cincinnati.—p. 543.
Specificity of Complement Fixation Test for Amebiasis. E. Weiss and L. Arnold, Chicago.—p. 548.
*Effects on Gastric Secretion in Dogs of Various Food Substances Employed in Treatment of Gastric Ulcer. Armine Alley, Montreal.—p. 555.
Note on Rôle of Achlorhydria in Etiology of Subacute Combined Degeneration of Spinal Cord: Experimental Study in Gastrectomized Dog. A. C. Ivy, F. P. Cuthbert and A. Weil, Chicago.—p. 560.
Clinical Types of Hyperinsulinism: Report of Cases. S. Harris, Birmingham, Ala.—p. 562.
Diabetic Coma in Children. H. J. John, Cleveland.—p. 569.
X-Ray Diagnosis of Activity and Cure of Duodenal Ulcer. Alice Ettinger and W. E. Davis, Boston.—p. 579.
*New Type of Serum Therapy for Treatment of Nonspecific Ulcerative Colitis: Preliminary Report. G. Shwartzman and A. Winkelstein, New York.—p. 582.
Carcinoma of Colon. R. R. Graham, Toronto.—p. 584.
High Rectal Pain: Analysis of One Hundred Cases. L. A. Buie and J. C. M. Brust, Rochester, Minn.—p. 591.

Effects of Desiccated Hog's Stomach in Achlorhydria.—Schiff and Tahl state that the oral administration of single doses of desiccated hog's stomach stimulates the secretion of free hydrochloric acid in normal persons and in patients with hypochlorhydria and apparent achlorhydria. The degree of acid secreted may exceed that produced after the injection of histamine, although in the majority of cases the converse is true with dosages of from 5 to 10 Gm. In genuine achlorhydria and achylia gastrica, no secretion of free hydrochloric acid results. The prolonged administration of desiccated hog's stomach in cases of genuine achlorhydria or achylia gastrica may cause the disappearance of symptoms without the return of free hydrochloric acid. The administration of desiccated hog's stomach is beneficial in cases of achlorhydria and achylia gastrica. This suggests that a common factor is lacking in these two conditions, which factor probably is present in desiccated hog's stomach. Evidently this is not the antianemic factor. In some instances, small doses taken at intervals may be adequate to keep the patient free from symptoms. The authors' results obtained during a study of two years, seven cases of which are reported, indicate that the symptomatology associated with achlorhydria is due not to the achlorhydria alone but to the lack of an unknown substance present in desiccated hog's stomach.

Effect of Ulcer Diet on Dog's Gastric Secretion.—Alley investigated the effects on the gastric secretion in two pouch dogs, of some of the foods in the diets of Jarotski, Sippy and Smithies, with the following results: 1. Cream or milk fed repeatedly produced a continuous secretion, and that on cream was much more prolonged than that on milk, but the peptic power on milk was higher. Alkalis increased the volume and acidity. 2. The volumes of secretion on milk or cream were much greater when given repeatedly as compared to those in one feeding. 3. Egg white and butter produced comparatively small secretions. 4. Cream of wheat stimulated a small secretion of high peptic power and low acidity, which was inhibited entirely when given during the peak of butter secretion. Liquid cream of wheat has the power of neutralizing completely the free acidity and of reducing greatly the total acidity of sham feeding juice. 5. Differences of secretory behavior were noticed between the glands of the greater curvature and lesser curvature regions in that the foods containing fat produced in the former a secretion greater in volume and longer in duration than in the latter.

Treatment of Nonspecific Ulcerative Colitis with Serum Therapy.—In the opinion of Shwartzman and Winkelstein the etiology of nonspecific ulcerative colitis is not established as yet. Nevertheless, whatever the primary, etiologic micro-organism may be, tissues rendered vulnerable by it may become receptive to the effect of natural bacterial inhabitants of the body. Among the micro-organisms of the stool, one particularly worthy of study along these lines is Bacillus coli. Serums were produced that were capable of neutralizing B. coli toxin in multiple proportions. Twenty-one patients affected with nonspecific colitis were treated with anticoli, immune horse serums containing from 35 to 75 "phenomenon-neutralizing" units, from 800 to 1,600 agglutinating and from 8 to 16 precipitating units. Following a control period of two weeks, during which emetine and symptomatic therapy were given, conjunctival and intradermal sensitivity tests were performed. If negative, 0.5 cc., 2 cc. and 5 cc. of serum were administered intramuscularly at intervals of six hours during the first day. If these injections were not followed by severe reactions, intravenous medication was given during the next forty-eight hours. It seems important to give large quantities of the serum in a short space of time, otherwise the antitoxin leaves the blood stream quickly. Because of the possibility of dangerous shock, despite negative sensitivity tests, the following precautions were observed: (1) Epinephrine solution was administered even for slight reactions, (2) divided dosage was employed—from 25 cc. to 100 cc.—until 300 cc. was given, and (3) when the dose exceeded 25 cc. the drip method consuming at least one hour was used. In this group, chills and moderate rises in temperature were encountered only twice. Urticaria (mild to severe) was the rule in from two to nineteen days after exhibition of the serum therapy. In eighteen cases the results were good. In fifteen the improvement was evidenced by an abrupt drop in temperature, reduced number of stools and clinical well being of the patients within from two to six days. In these patients, the stools became formed and, sigmoidoscopically, the ulcerations had disappeared in from two to three weeks. In three other cases the improvement was noted in from one to three weeks. The remaining three cases were considered therapeutic failures. In one of these a perisigmoid abscess developed even though the mucosal ulcers healed. In another case the serum was administered early—on the tenth day of a septic course. A study of the toxin of this patient's B. coli revealed an absence of neutralization by the serum used. Ten cases have been followed for from six months to one year. In two of this group there were mild recurrences—one at seven months and one a year after treatment.

Anatomical Record, Philadelphia

60: 251-376 (Oct. 25) 1934

Studies on Cell Structure by the Freezing-Drying Method: V. Chemical Basis of Organization of the Cell. R. R. Bensley and N. L. Hoerr, Chicago.—p. 251.
Absorption of Estrogenic Substances of Pregnant Urine Administered Orally to Young Rats. C. B. Freudenberger and P. M. Howard, Salt Lake City.—p. 267.
Significant Example of Pedunculated Postminimus. H. Cummins, New Orleans.—p. 273.
Control of Reproductive Activity in Annual-Breeding Mammal (Citellus Tridecemlineatus). C. R. Moore, G. F. Simmons, L. J. Wells, M. Zalesky and W. O. Nelson, Chicago.—p. 279.
Study of Seasonal Changes in Adrenal Gland of Thirteen-Lined Ground Squirrel (Citellus Tridecemlineatus), with Particular Reference to Its Sexual Cycle. M. Zalesky, Chicago.—p. 291.
Further Studies on Influence of Suckling. H. Selye and T. McKeown, Montreal.—p. 323.
*Prenatal Incidence, Structure and Development of Some Human Synovial Bursae. B. M. Black, San Francisco.—p. 333.
Morphologic Studies on Anterior Pituitaries of Mature Female Rats Receiving Injections of Pregnancy Urine Extracts. J. M. Wolfe, E. T. Ellison and L. Rosenfeld, Nashville, Tenn.—p. 357.

Development of Synovial Bursae.—Black investigated the subacromial, the prepatellar and the subcutaneous olecranon bursae of 200 human fetuses by means of gross dissection and also in microscopic preparations. Since neither the subcutaneous olecranon bursa nor the subcutaneous prepatellar bursa was present in fetuses, he believes that it is probable that subcutaneous bursae do not develop before birth. Neither the subfascial

nor the subtendinous prepatellar bursae were present in the fetus, although the region in which the subfascial bursa is located was filled with loose tissue. The latter probably develops before the other prepatellar bursae. The subacromial bursa is present in the fetus. It develops early in the third month from a fairly definite anlage. The incidence of this bursa in the fetal period is not so high as in the adults. It was found to be 72.5 per cent before birth, when other factors may play a part in their formation. The structure and form of the subacromial bursa in the fetus differs from that in the adult. It is more rectangular and does not extend relatively as far either posteriorly or anteriorly.

Archives of Surgery, Chicago

29: 697-894 (Nov.) 1934

Passive Vascular Exercises: Treatment of Peripheral Obliterative Arterial Diseases by Rhythmic Alternation of Environmental Pressure. L. G. Herrmann and M. R. Reid, Cincinnati.—p. 697.

Thrombosis of Sigmoid or Lateral Sinus: Report of Thirty Cases. J. L. Dill, Detroit, and S. J. Crowe, Baltimore.—p. 705.

Vesical Distention: II. Effects on Motor Mechanism of Upper Urinary Tract: Experimental Study. C. D. Creevy, Minneapolis.—p. 723.

*III. Bacteriophages in Treatment of Colon Bacillus Septicemia. W. J. MacNeal, Frances C. Frisbee and Martha Applebaum, New York. —p. 741.

*IV. Bacteriophages in Chronic Colitis of Undetermined Causation and in Intestinal Fistulas. W. J. MacNeal, Frances C. Frisbee and Martha Applebaum, New York.—p. 748.

*Effect of Epinephrine on the Sympathectomized Human Extremity: Additional Cause of Failure of Operations for Raynaud's Disease. R. H. Smithwick, N. E. Freeman and J. C. White, Boston.—p. 759.

*Struma Lymphomatosa (Hashimoto) Associated with Hyperthyroidism: Report of Case with Clinical and Histopathologic Study. D. Polowe, Paterson, N. J.—p. 768.

Cartilaginous Exostosis of Scapula: Report of Two Cases. J. J. Du Mortier and B. Halpert, New Haven, Conn.—p. 778.

Influence of Diet Rich in Casein on Strength of Bone and Healing of Fractures. E. L. Howes and R. M. McKeown, New York.—p. 786.

Treatment of Varicosities: Preliminary High Ligation of Internal Saphenous Vein with Injection of Sclerosing Solutions. H. H. Faxon, Boston.—p. 794.

Avertin in Preanesthetic Medication: Survey of One Thousand Eight Hundred and Thirty-One Surgical Anesthesias. O. W. Barlow, G. L. Fife and A. C. Hodgins, Cleveland.—p. 810.

Acute Intestinal Obstruction: Immediate and Late Results in a Hundred Consecutive Cases. C. B. Rentschler, Reading, Pa.—p. 828.

Shock: Further Studies with Particular Reference to Effects of Hemorrhage. A. Blalock, Nashville, Tenn.—p. 837.

Therapeutic Use of Concentrated Antistreptococcus Serum of New York State Department of Health. Adele E. Sheplar, Martha Jane Spence and W. J. MacNeal, New York.—p. 858.

Review of Urologic Surgery. A. J. Scholl, Los Angeles; E. S. Judd, Rochester, Minn.; J. Verbrugge, Antwerp, Belgium; A. B. Hepler, Seattle; R. Gutierrez, New York, and V. J. O'Conor, Chicago.—p. 866.

Bacteriophages in Treatment of Colon Bacillus Septicemia.—MacNeal and his co-workers urge the intravenous use of an asparagin preparation of colon bacteriophage in colon bacillus septicemia. In four of their cases the microbe present in the blood stream was found to be susceptible to lysis by their stock colon bacteriophage. In their fifth case the bacteriologic studies were carried out elsewhere and they did not have opportunity for adequate study of the infecting microbe. The observations suggest that organisms of this group virulent enough to produce septicemia are in general more likely to prove susceptible to bacteriophage than those found in the intestine or in the urinary tract. Whether there is an actual correlation between the virulence of the microbe and its susceptibility to bacteriophage cannot be decided from this evidence alone, but the suggestion is of some interest. It seems wise to begin treatment with a stock bacteriophage as soon as the specific nature of the organism in the blood culture has been recognized. At the same time, the testing of this culture against the bacteriophage and the preparation of a specific bacteriophage by filtration of lysed cultures of the specific microbic strain should be pushed as rapidly as possible in the laboratory, and as soon as such a specific preparation is ready it should be used in place of the stock bacteriophage.

Bacteriophages in Colitis and in Intestinal Fistulas—MacNeal and his associates also find that the empirical use of preparations of bacteriophage potent against some of the intestinal microbes has been followed by favorable results in patients suffering from chronic colitis of undetermined causation. Because of the evident harmless nature of this therapy, it would appear worthy of trial in this sometimes baffling condition. Postoperative intestinal fistulas infected with a mixture of intestinal bacteria have been, in two instances, influenced favorably by the use of bacteriophages active against the intestinal bacteria. The therapeutic results are not dramatic. The bacteriophages seem rather to exercise a merely beneficent influence on the course of the essentially chronic ailment.

Effect of Epinephrine on the Sympathectomized Extremity.—Smithwick and his associates show that human blood vessels innervated by the sympathetic nervous system become sensitized to circulating epinephrine following resection of sympathetic ganglions. Tests in a series of nine cases in man following complete sympathetic denervation of extremities have shown marked vasospasm in the presence of minute quantities of epinephrine in the circulating blood. The intravenous infusion of a 1:250,000 solution of epinephrine, an amount which causes little change in the normal extremity, is sufficient to lower the surface temperature of the denervated side as much as 15 degrees F. Similar changes take place when the patient's suprarenals are stimulated to secrete epinephrine by insulin hypoglycemia. Identical vasospastic phenomena, which occur in sympathectomized cats and rabbits in insulin hypoglycemia, are abolished by suprarenal denervation. This hypersensitization of the arteries to epinephrine takes place only on degeneration of the vasomotor nerves. It is not present after procaine hydrochloride block or during the first week after operation. It takes from seven to eight days for sensitization to appear. The authors believe that this hypersensitivity to the circulating hormone epinephrine, which develops in sympathectomized extremities, constitutes a heretofore unrecognized but important source of unsatisfactory results in Raynaud's disease.

Struma Lymphomatosa Associated with Hyperthyroidism.—Polowe reports a case of struma lymphomatosa associated with hyperthyroidism in a woman aged 26. It is shown that clinically the reconstructed sequence of events may be, first, a phase of hyperthyroidism; second, a phase of apparently normal thyroid activity, which may or may not be associated with symptoms referable to compression of the trachea and, third, a hypothyroid or myxedematous phase, which also may or may not be associated with symptoms referable to compression of the trachea. Because of its usually insidious course it is conceivable that struma lymphomatosa may go unnoticed in any of its phases during the life of the patient. It is too soon for the author to judge the efficacy of thyroidectomy during the early stage of struma lymphomatosa associated with hyperthyroidism. Thus far the patient is improved definitely. Thyroidectomy is contraindicated unless the pressure on the trachea interferes greatly with the patient's activities. Joll suggested the administration of dried thyroid as a postoperative therapeutic measure, with regular check ups on the basal metabolic rate as a guide.

Colorado Medicine, Denver

31: 369-424 (Nov.) 1934

Heart Disease and the General Practitioner. W. L. Bierring, Des Moines, Iowa.—p. 372.

Moulage Process for Preservation of Surgical Specimens. N. Mumey, Denver.—p. 377.

Southwestern Medicine, Phoenix, Arizona

18: 287-318 (Sept.) 1934

Preoperative Preparation and Postoperative Care. E. C. Moore, Los Angeles.—p. 287.

Pathology of Pulmonary Tuberculosis: Its Relation to Clinical Manifestations, Course and Therapeutics. F. T. Fahlen, Phoenix, Ariz.—p. 290.

Proctoscopy as Aid to Diagnosis. W. R. Hewitt, Tucson, Ariz.—p. 294.

Postpartum Hemorrhage. R. K. Smith, Tucson, Ariz.—p. 297.

Acute Poliomyelitis. A. S. Lathrop, Santa Fe, N. M.—p. 299.

Celiac Disease: Two Case Reports. B. P. Storts, Tucson, Ariz.—p. 302.

Training of Midwives. G. Heusinkveld, Denver.—p. 303.

Coccidioidal Granuloma: Report of Fatal Case. L. M. Smith and W. W. Waite, El Paso, Texas.—p. 305.

18: 319-358 (Oct.) 1934

Concerning Surgical Treatment of Inflammatory Lesions of the Biliary Tract. I. Chavez, Guadalajara, Mexico.—p. 327.

Tetany from Hysterical Hyperpnea. T. G. Reynolds, Esperanza, Mexico.—p. 331.

Fractures, Especially of Long Bones. F. T. Hogeland, Cananea, Mexico. —p. 333.

FOREIGN

An asterisk (*) before a title indicates that the article is abstracted below. Single case reports and trials of new drugs are usually omitted.

British Journal of Dermatology and Syphilis, London

46: 399-456 (Oct.) 1934

Gold and Bismuth in Treatment of Lupus Erythematosus. A. G. Smith.—p. 399.
Cat Scabies. H. MacCormac.—p. 411.
Recurrent Buccal and Vulval Ulcers with Associated Embolic Phenomena in Skin and Eye. G. P. B. Whitwell.—p. 414.

British Medical Journal, London

2: 707-754 (Oct. 20) 1934

Inventions and the Outlook in Neurology. J. Collier.—p. 707.
Immunization in Prevention of Specific Fevers. R. A. O'Brien.—p. 712.
Irradiation Treatment of Malignant Intrathoracic Tumors. F. G. Chandler, N. S. Finzi and J. Maxwell.—p. 714.
Special Clinics for Diabetics: Organization and Experiences. L. Wislicki.—p. 717.
Anemias of Pregnancy: Note. G. D. Kersley and D. A. Mitchell.—p. 720.

2: 755-796 (Oct. 27) 1934

Bad Surgical Risks. G. Gordon-Taylor.—p. 755.
Retroversion of Uterus. S. G. Luker.—p. 760.
Hemoptysis: Note on Pathology and Treatment. H. V. Morlock and A. J. S. Pinchin.—p. 762.
Observations on Therapeutic Malaria, with Especial Reference to Case of Hemoglobinuria. C. B. Bamford.—p. 764.
Prevention of Intracranial Injuries of the New-Born. R. H. Nattrass.—p. 766.
Recurrent Vomiting Attacks in Childhood, with Especial Reference to Allergic Factors. K. H. Tallerman.—p. 767.
New Cases of War Blindness Due to Mustard Gas. R. E. Bickerton.—p. 769.

2: 797-844 (Nov. 3) 1934

Cancer of Esophagus. H. S. Souttar.—p. 797.
Adolescent and Senile Kyphosis. C. Lambrinudi.—p. 800.
*Effect of Prolonged Administration of Acid Extract of Anterior Pituitary on Thyroid Gland of Guinea-Pigs. E. F. Scowen and A. W. Spence.—p. 805.
Roentgen-Ray Examination of Empyema Cavities: Note. D. Browne.—p. 807.
Left Subclavian Aneurysm in Association with Cervical Rib. T. G. Quinn and G. Davison.—p. 808.
*Blindness After Neoarsphenamine: Case. F. Juler.—p. 809.

Effect of Acid Extract of Anterior Pituitary on Thyroid.—Scowen and Spence produced thyroid hyperplasia, exophthalmos and suprarenal enlargement in guinea-pigs by the prolonged administration of acid extract of anterior pituitary substance. Although the majority of the thyroids had involuted to the colloid state during treatment, a certain proportion remained hyperplastic even after ninety-three days. The suprarenal enlargement was greatest in those animals whose thyroids had involuted. No evidence of thyroid exhaustion was observed. The production by Collip and Anderson of an antithyrotropic factor in the serum of an animal treated for a prolonged period with thyrotropic hormone has been confirmed. The mechanism responsible for the thyroid involution is discussed.

Blindness After Neoarsphenamine.—Juler reports the case of a woman, aged 46, having a positive Wassermann reaction who was given six doses of neoarsphenamine, commencing with 0.3 Gm. and concluding with 0.9 Gm. twenty-eight days later. She was also given a mixture of red mercuric iodide by mouth. A skin rash developed on the day after the last injection. Fifteen days later she became rapidly blind in both eyes; the left lost all perception of light and the right vision was reduced to hand movements. Two days later both disks were white, with slightly hazy outlines and the arteries were narrow, with white lines along them. The vision varied but little afterward and two years later she still had no perception of light in the left and bare perception of light in the right eye. The disks were white with hazy edges; some of the vessels were small and some of fair size. Her general condition remained fair at the time of the onset of blindness; she was in a somewhat toxic state, but there was no encephalitis and no meningitis. The rash had subsided. The cerebrospinal fluid was not examined. Glyceryl trinitrate was administered on the day after the onset of the blindness and a few days later sodium thiosulphate was given intravenously, but without benefit. The Wassermann reaction and the Kahn tests were still positive two months later.

Lancet, London

2: 909-968 (Oct. 27) 1934

Hughlings Jackson and His Influence on Neurology. E. F. Buzzard.—p. 909.
*Thyrotoxic Hypertension. J. Parkinson and C. Hoyle.—p. 913.
*Gastric Lesion Produced by Extract of Pituitary Gland. E. C. Dodds, R. L. Noble and E. R. Smith.—p. 918.
Anemias and Their Treatment. L. J. Witts.—p. 919.
Investigation of Results of Splitting the Kidney. T. W. Mimpriss.—p. 921.
Auricular Flutter with Temporary Reversion to Normal Rhythm After Six Years. M. Campbell and S. S. Suzman.—p. 923.
Coarctation of Aorta with Infective Endocarditis. J. W. Brown.—p. 924.

Thyrotoxic Hypertension.—Parkinson and Hoyle investigated the common occurrence of thyroid toxemia in patients having essential hypertension (hyperpiesia). They find this association so prevalent and so influential on the course, prognosis and treatment that they submit the term thyrotoxic hypertension as applicable. Without adducing other evidence, the association is sufficiently common to suggest that long standing thyrotoxicosis may be one of the causes of essential hypertension. Such patients are to be separated from the general group of essential hypertension, if not etiologically, then in the sphere of diagnosis and treatment; for the clinical features, course and treatment are largely determined by the coexistent thyroid toxemia. The recognition of this factor must therefore become important in diagnosis. The condition is ten times more frequent in women than in men; it is rare before the age of 40, and most patients are between 50 and 60 years of age. Two thirds have had a chronic goiter for many years, and at least half of these have also manifested chronic thyrotoxemia. There may be a history of exophthalmic goiter, supposedly cured or even operated on. Thyroid enlargement, usually slight, may be minimal or doubtful; the authors have seen a number of cases in which it has been impossible to demonstrate any enlargement, though the thyroid element could not be denied. In some cases enlargement of the thyroid has been present many years though disregarded or even denied. Yet the tachycardia, thinness or wasting, the thyroid temperament with its energy and restlessness, a fine tremor and other general evidence convinces one of thyroid dysfunction. Moreover, the character of the cardiac enlargement often shows the influence of the goiter in addition to that of hypertension. It determines auricular enlargement; for instance, by way of auricular fibrillation. Sometimes only two or three typical signs of thyrotoxicosis are present, and such cases fall into the group of "masked hyperthyroidism," but here involving hypertension. These combined features in patients with hypertension justify their separation into a clinical group with a distinctive prognosis and treatment. Recognition of the thyroid factor influences treatment. Rational therapy must be discriminating. The question of operation arises for the relief of symptoms and the prevention of auricular fibrillation and consequent cardiac failure. Subtotal thyroidectomy will often relieve symptoms and prevent or dispel auricular fibrillation, which so often determines a premature heart failure in hypertension.

Gastric Lesion Produced by Extract of Pituitary.—Dodds and his associates found that the posterior lobe of the pituitary contains a substance capable of inducing a severe lesion of the acid-bearing area of the stomach. This is efficacious when injected subcutaneously, and it is contained also in the standard British Pharmacopeia extract of the posterior lobe. This extract is active by mouth. The oxytocic principle even in massive doses will not produce a lesion, while the pressor factor in similar doses has a definite action. Although it would appear that the gastrotoxic factor may be a substance differing from the other two hormones of the posterior lobe, a definite statement cannot be made until it has been further purified. The authors state that at present it is impossible to know whether the substance in smaller quantities plays a physiologic part, nor is it possible to state its mode of action. It seems that either the substance has a direct toxic action on the cells of the acid-secreting area of the stomach or perhaps it stimulates secretion of hydrochloric acid to a damaging extent. They are performing intensive investigations on the chemical nature and mode of action of the compound.

Archives des Maladies de l'Appareil Digestif, Paris

24: 785-904 (Oct.) 1934

Cholesterol of Foods. C. Achard, Jeanne Lévy and N. Georgiakakis.—p. 785.
Inflammatory Tumors of Stomach. R. Denis.—p. 794.
Body Typology of Megacolon Carriers. F. Turyn.—p. 819.
Rôle of Immunity and Anaphylaxis in Chronic Infectious Colitis. L. Berlin, O. Schmidt and B. Lewin.—p. 826.
*Bazzano Method in Treatment of Gastroduodenal Ulcer. F. Fernandez.—p. 836.
*New Procedure of Functional Examination of Liver: Deaminizing Power of Liver After Glycocoll Injection. S. Caccuri and A. Chiariello.—p. 840.

Treatment of Gastroduodenal Ulcer.—Fernandez treated nine patients having duodenal ulcers with the Bazzano method. After examination and diagnosis they received daily intravenous injections of 2 cc. of a 25 per cent aqueous solution of sodium benzoate. At the same time they were kept at rest in bed and given a milk diet at first to which additions were made later. After a series of from twenty-five to thirty injections, treatment was suspended to observe the late effects. Some patients received two or three series. Except for slight arterial hypotension following the penetration of the medicament in the veins, no untoward incidents were observed. The pains, vomiting and epigastric tenderness receded rapidly. Burning, however, sometimes persisted and necessitated the addition of alkalis to the diet. The blood disappeared from the stools, there was a gain in weight, the general condition improved and often the roentgenologic signs disappeared. The author is nevertheless skeptical in attributing the improvement to sodium benzoate.

Functional Examination of Liver.—Caccuri and Chiariello attempted the examination of the functional capacity of the liver by means of the Bufano technic. This consists in the intravenous injection of 10 cc. of a 12 per cent solution of glycocoll and measurement of the blood amino nitrogen before and fifteen, twenty, thirty and sixty minutes after the injection. Normally there is a decrease in the amino acid proportion after the injection. If there is a change in hepatic function, this proportion shows an increase, which may persist until after the end of the test, associated with variations depending on the functional state of the liver. After studying this method in normal persons, the authors studied the amino acid in the blood after the injection of glycocoll in eighteen patients with hepatic lesions. These were divided as follows: One with common duct stones had icterus, five cirrhosis, one cirrhosis, malaria and syphilis simultaneously, one cancer of the liver, five cholecystitis, one hepatic syphilis, one hepatic abscess, one catarrhal jaundice, one colitis and mild liver enlargement, one a double mitral lesion and aortic insufficiency in a state of decompensation with liver enlargement, one sulphocarbonism, and one syphilis after arsenical treatment. In all these patients the amino acid curve showed the functional state of the liver. The same technic was followed in rabbits intoxicated by phosphorus, carbon bisulphide, trichloro-ethylene and thorium dioxide sol. In all, the amino acid curve gave pathologic results. Finally, in experimental studies on dogs, the amino acid curves following occlusion of the portal vein or bile duct were abnormal, revealing a functional decrease in the capacity of the liver.

Presse Médicale, Paris

42: 1593-1616 (Oct. 13) 1934

Organization of Vaccination Against Yellow Fever in France. J. Laigret.—p. 1593.
*Plasma Phosphatase in Different Conditions (Bone Diseases, Fractures, Icterus and so on). B. Austoni and G. Coggi.—p. 1594.
Influence of Skimming and of Addition of Various Glucides on Alimentary Value of Cow's Milk: Dietetic and Therapeutic Applications. R. Lecoq.—p. 1597.

Plasma Phosphatase.—Austoni and Coggi studied the phosphatasic activity of the blood by the method of Kay in several different bone disorders. Its activity was not found markedly increased except in Paget's disease. In fractures the plasma phosphatase is slightly but inconstantly increased coincident with the solidification of the callus. A definite and constant increase in plasma phosphatase was determined in two cases of intestinal exclusion of bile and obstructive jaundice of ten and twenty days duration, respectively. Similar changes in phosphatase could not be determined in icterus of other types. Plasma phosphatase seems closely linked to the metabolism of calcium and phosphorus, and the hyperphosphatemia may be considered an early symptom of changes in the metabolism of these substances.

Schweizerische medizinische Wochenschrift, Basel

64: 977-1000 (Oct. 27) 1934. Partial Index

Foundations of Organization for Campaign Against Cancer. Gösta Forssell.—p. 977.
Cancer of Skin and Research on Cancer. G. Miescher.—p. 979.
Iodine Exchange and Thyroxine Content of Struma Nodosa. I. Abelin and N. E. Finkelstein.—p. 985.
Some Cases of Occupational Asthma with Allergy Against Simple Chemical Substances. A. Bergmann.—p. 987.
*Modification of Resorption and Elimination of Arsenic by Absorbents and Opiates. J. Leibowitz.—p. 989.
Electrocardiographic Studies in Scarlet Fever and Diphtheria. W. Berger and M. Olloz.—p. 992.
*New Etiology of Facial Eczema. H. Meister.—p. 993.

Resorption and Elimination of Arsenic.—Leibowitz studied arsenic poisoning in rabbits. He found that following the administration of one large dose (lethal or sublethal) approximately 40 per cent of the poison is eliminated with the urine and 15 per cent in the feces in the course of from five to seven days. The changes in the resorption and elimination of the arsenic that are produced by opiates, particularly by a preparation containing the total opium colloids in the form of soluble hydrochlorides, or by absorbents such as purified siliceous earth or medicinal carbon, are not of fundamental significance. Because of the prolonged contraction of the sphincter of the pyloric antrum resulting from the opium preparation, there is a considerable retardation in the passage of the poison from the stomach into the intestine, and resorption of the poison is thus retarded. Subsequent administration of the opium preparation, however, does not produce this effect. The resorption of the arsenic from the intestine is not inhibited by the opium preparation. On the contrary, because the intestinal peristalsis is retarded, the time during which the toxin can be absorbed is prolonged, and more arsenic can pass from the intestine into the blood stream. The arsenic elimination in the urine is slightly increased by the influence of the opiate, but in the feces it is slightly reduced. Purified siliceous earth is without influence on the mechanism of the gastric passage. In the intestine the siliceous earth more or less binds the arsenic, and thus the resorption is inhibited. The elimination in the urine is somewhat reduced under the influence of siliceous earth, but it is somewhat increased in the feces. The action exerted by the opiate on the resorption and elimination of arsenic is nullified by the simultaneous administration of siliceous earth, because the latter absorbs the active colloids of the opiate.

Facial Eczema.—Meister observed in recent months a peculiar facial disorder that became manifest in the form of conjunctivitis, periocular and perioral eczema and edema. He found that the disorder appeared following the use of beaked flutes that were made out of cocobolo wood. The disorder disappeared within about a week but recurred on renewed contact with the flutes. One of the patients, who was an instructor in flute playing, later developed also a hypersensitivity to another type of tropical wood from which beaked flutes are often made; namely, granadilla wood. He did not become completely free from the symptoms until he avoided contact with these woods. The author describes another case of his own observation and states that a third one was reported to him by another observer. He points out that the beaked flute is becoming more popular again and thinks that, if flutes are used that are made of these woods, facial eczema may become more frequent.

CORRECTION

Scarlet Fever Immunization by Nasal Route.—In the abstract of the paper by Friedman and his associates in THE JOURNAL, December 15, page 1889, the last sentence should read "For children less than 3 years of age they recommend, provisionally, a total of 115,000, and in those more than 3 [years of age], 202,000 skin test doses."

JOURNALS ABSTRACTED IN THE CURRENT MEDICAL LITERATURE DEPARTMENT, JULY-DECEMBER 1934

Abstracts of important articles in the following journals have been made in the Current Literature Department of THE JOURNAL during the past six months. Any of the journals, except those starred, will be lent by THE JOURNAL to subscribers in continental United States and Canada and to members of the American Medical Association for a period not exceeding three days. Two journals may be borrowed at a time. No journals are available prior to 1925. Requests for periodicals should be addressed to the Library of the American Medical Association and should be accompanied by stamps to cover postage (6 cents if one and 12 cents if two periodicals are requested). Thus most of these journals are accessible to the general practitioner.

Acta Chirurgica Scandinavica. Stockholm.
Acta Medica Scandinavica. Stockholm.
Acta Obstetricia et Gynecologica Scandinavica. Helsingfors.
Actas Dermo-Sifiliográficas. Madrid.
American Heart Journal. St. Louis.
American Journal of Anatomy. Philadelphia.
American Journal of Cancer. New York.
American Journal of Clinical Pathology. Baltimore.
American Journal of Digestive Diseases and Nutrition. Chicago.
*American Journal of Diseases of Children. A. M. A., Chicago.
American Journal of Hygiene. Baltimore.
American Journal of the Medical Sciences. Philadelphia.
American Journal of Obstetrics and Gynecology. St. Louis.
American Journal of Ophthalmology. St. Louis.
American Journal of Orthopsychiatry. Menasha, Wis.
American Journal of Pathology. Boston.
American Journal of Physiology. Baltimore.
American Journal of Psychiatry. New York.
American Journal of Public Health. New York.
American Journal of Roentgenol. & Rad. Therapy. Springfield, Ill.
American Journal of Surgery. New York.
American Journal of Syphilis and Neurology. St. Louis.
American Journal of Tropical Medicine. Baltimore.
American Review of Tuberculosis. New York.
Anatomical Record. Philadelphia.
Annales de Dermatologie et de Syphiligraphie. Paris.
Annales de Médecine. Paris.
Annals of Internal Medicine. Lancaster, Pa.
Annals of Medical History. New York.
Annals of Otology, Rhinology and Laryngology. St. Louis.
Annals of Pickett-Thomson Research Laboratory. London.
Annals of Surgery. Philadelphia.
Archiv für Dermatologie und Syphilis. Berlin.
Archiv für Gynäkologie. Berlin.
Archiv für Kinderheilkunde. Stuttgart.
Archiv für klinische Chirurgie. Berlin.
Archiv für Verdauungs-Krankheiten. Berlin.
*Archives of Dermatology and Syphilology. A. M. A., Chicago.
Archives of Disease in Childhood. London.
*Archives of Internal Medicine. A. M. A., Chicago.
Archives des Maladies de l'Appareil Digestif. Paris.
Archives des Maladies du Cœur. Paris.
Archives de Médecine des Enfants. Paris.
Archives Medico-Chirurgicales de l'Appareil Respiratoire. Paris.
*Archives of Neurology and Psychiatry. A. M. A., Chicago.
*Archives of Ophthalmology. A. M. A., Chicago.
*Archives of Otolaryngology. A. M. A., Chicago.
*Archives of Pathology. A. M. A., Chicago.
Archives of Physical Therapy, X-Ray, Radium. Chicago.
*Archives of Surgery. A. M. A., Chicago.
Archivio Italiano di Chirurgia. Bologna.
Archivos de Cardiología y Hematología. Madrid.
Archivos de Medicina, Cirugía y Especialidades. Madrid.
Archivos de Neurobiología. Madrid.
Beiträge zur Klinik der Tuberkulose. Berlin.
Beiträge zur klinischen Chirurgie. Berlin.
Bibliotek for Læger. Copenhagen.
Brain. London.
Bristol Medico-Chirurgical Journal.
British Journal of Anæsthesia. Manchester.
British Journal of Children's Diseases. London.
British Journal of Dermatology and Syphilis. London.
British Journal of Experimental Pathology. London.
British Journal of Ophthalmology. London.
British Journal of Physical Medicine. London.
British Journal of Radiology. London.
British Journal of Surgery. Bristol.
British Journal of Tuberculosis. London.
British Journal of Urology. London.
British Medical Journal. London.
Bruxelles-Médical. Brussels.
Bulletin of the Johns Hopkins Hospital. Baltimore.
California and Western Medicine. San Francisco.
Canadian Medical Association Journal. Montreal.
Canadian Public Health Journal. Toronto.
Chinese Medical Journal. Peiping.
Chirurg. Berlin

*Cannot be lent.

Chirurgia degli Organi di Movimento. Bologna.
Clinica Chirurgica. Milan.
Clinica Medica Italiana. Milan.
Clinical Journal. London.
Colorado Medicine. Denver.
Delaware State Medical Journal. Wilmington.
Dermatologische Zeitschrift. Berlin.
Dermosifilografo. Turin.
Deutsche medizinische Wochenschrift. Leipzig.
Deutsche Zeitschrift für Chirurgie. Berlin.
Deutsche Zeitschrift für Nervenheilkunde. Berlin.
Deutsches Archiv für klinische Medizin. Berlin.
East African Medical Journal. Nairobi.
Edinburgh Medical Journal.
Endocrinology. Los Angeles.
Finska Läkaresällskapets Handlingar. Helsingfors.
Frankfurter Zeitschrift für Pathologie. Munich.
Giornale di Clinica Medica. Parma.
Glasgow Medical Journal.
Guy's Hospital Reports. London.
Gynécologie et Obstétrique. Paris.
Hospitalstidende. Copenhagen.
Hygiea. Stockholm.
Illinois Medical Journal. Chicago.
Indian Journal of Medical Research. Calcutta.
Indian Medical Gazette. Calcutta.
International Journal of Psycho-Analysis. London.
Irish Journal of Medical Science. Dublin.
Jahrbuch für Kinderheilkunde. Berlin.
Japanese Journal of Experimental Medicine. Tokyo.
Japanese Journal of Gastroenterology. Kyoto.
Japanese Journal of Obstetrics and Gynecology. Kyoto.
Journal of Alabama State Medical Association. Montgomery.
Journal of Allergy. St. Louis.
Journal of Anatomy. London.
Journal of the Arkansas Medical Society. Fort Smith.
Journal of Bacteriology. Baltimore.
Journal of Biological Chemistry. Baltimore.
Journal of Bone and Joint Surgery. Boston.
Journal de Chirurgie. Paris.
Journal of Clinical Investigation. New York.
Journal of Comparative Neurology. Philadelphia.
Journal of Experimental Medicine. New York.
Journal of the Florida Medical Association. Jacksonville.
Journal of General Physiology. New York.
Journal of Hygiene. London.
Journal of Immunology. Baltimore.
Journal of the Indiana State Medical Association. Indianapolis.
Journal of Industrial Hygiene. Baltimore.
Journal of Infectious Diseases. Chicago.
Journal of Iowa State Medical Society. Des Moines.
Journal of Kansas Medical Society. Topeka.
Journal of Laboratory and Clinical Medicine. St. Louis.
Journal of Laryngology and Otology. London.
Journal of Medical Association of Georgia. Atlanta.
Journal of Medical Society of New Jersey. Trenton.
Journal of Mental Science. London.
Journal of Michigan State Medical Society. Grand Rapids.
Journal of Missouri State Medical Association. St. Louis.
Journal of Nervous and Mental Disease. New York.
Journal of Neurology and Psychopathology. London.
Journal of Nutrition. Philadelphia.
Journal of Obstetrics and Gynæcology of British Empire. Manchester.
Journal of Oklahoma State Medical Association. McAlester.
Journal of Oriental Medicine. South Manchuria.
Journal of Pathology and Bacteriology. Edinburgh.
Journal of Pediatrics. St. Louis.
Journal of Pharmacology and Experimental Therapeutics. Baltimore.
Journal of the Philippine Islands Medical Association. Manila.
Journal of Physiology. London.
Journal of South Carolina Medical Association. Greenville.
Journal of State Medicine. London.
Journal of Tennessee State Medical Association. Nashville.
Journal of Thoracic Surgery. St. Louis.
Journal of Tropical Medicine and Hygiene. London.
Journal of Urology. Baltimore.
Kentucky Medical Journal. Bowling Green.
Klinicheskaya Meditsina. Moscow.
Klinische Wochenschrift. Berlin.

Lancet. London.
Laryngoscope. St. Louis.
Lisboa Médica.
Lyon Chirurgical.
Maandschrift voor Kindergenesskunde. Leyden.
Maine Medical Journal. Portland.
Medical Annals of District of Columbia. Washington.
Medical Bulletin of the Veterans' Administration. Washington, D. C.
Medical Journal of Australia. Sydney.
Medical Press and Circular. London.
Medicina Ibera. Madrid.
Medicine. Baltimore.
Medizinische Klinik. Berlin.
Military Surgeon. Washington, D. C.
Minerva Medica. Turin.
Minnesota Medicine. St. Paul.
Monatsschrift für Geburtshülfe und Gynäkologie. Berlin.
Monatsschrift für Kinderheilkunde. Berlin.
Münchener medizinische Wochenschrift. Munich.
Nebraska State Medical Journal. Lincoln.
Nederlandsch Tijdschrift voor Geneeskunde. Haarlem.
New England Journal of Medicine. Boston.
New Orleans Medical and Surgical Journal.
New York State Journal of Medicine. New York.
Norsk Magasin for Lægevidenskapen. Oslo.
Northwest Medicine. Seattle.
Nourrisson. Paris.
Ohio State Medical Journal. Columbus.
Paris Médical.
Pediatria. Naples.
Pennsylvania Medical Journal. Harrisburg.
Philippine Journal of Science. Manila.
Policlinico (Pract. Sect., Med. Sect. and Surg. Sect.). Rome.
Practitioner. London.
Prensa Médica Argentina. Buenos Aires.
Presse Médicale. Paris.
Progrès Médical. Paris.
Progresos de la clinica. Madrid.
Psychiatric Quarterly. Albany, N. Y.
Psychoanalytic Quarterly. Albany, N. Y.
Public Health Reports. Washington, D. C.
Puerto Rico Journal of Public Health & Tropical Medicine. San Juan.
Quarterly Bulletin of Health Organization of League of Nations. Geneva.
Quarterly Journal of Medicine. Oxford.
Radiology. Syracuse, N. Y.
Review of Gastroenterology. New York.
Revista Médica del Rosario. Rosario de Santa Fe.
Revue de Chirurgie. Paris.
Revue Française de Pédiatrie. Paris.
Rhode Island Medical Journal. Providence.
Riforma Medica. Naples.
Rivista di Malariologia. Rome.
Schweizerische medizinische Wochenschrift. Basel.
Science. New York.
Semana Médica. Buenos Aires.
South African Medical Journal. Cape Town.
Southern Medical Journal. Birmingham, Ala.
Southern Surgeon. Atlanta, Ga.
Southwestern Medicine. Phoenix, Ariz.
Sovetskaya Psikhonevrologia. Kharkov.
Sovetskaya Vrachebnaya Gazeta. Leningrad.
Strahlentherapie. Berlin.
Surgery, Gynecology and Obstetrics. Chicago.
Svenska Läkaresällskapets Handlingar. Stockholm.
Texas State Journal of Medicine. Fort Worth.
Tubercle. London.
Ugeskrift for Læger. Copenhagen.
United States Naval Medical Bulletin. Washington, D. C.
Virginia Medical Monthly. Richmond.
Vrachebnoe Delo. Kharkov.
Western Journal of Surgery, Obstetrics and Gynecology. Portland, Ore.
West Virginia Medical Journal. Charleston.
Wiener Archiv für innere Medizin. Vienna.
Wiener klinische Wochenschrift. Vienna.
Wisconsin Medical Journal. Madison.
Yale Journal of Biology and Medicine. New Haven, Conn.
Zeitschrift für Geburtshülfe und Gynäkologie. Stuttgart.
Zeitschrift für die gesamte experimentelle Medizin. Berlin.
Zeitschrift für Hygiene und Infektionskrankheiten. Berlin.
Zeitschrift für Kinderheilkunde. Berlin.
Zeitschrift für klinische Medizin. Berlin.
Zeitschrift für Tuberkulose. Leipzig.
Zeitschrift für urologische Chirurgie. Berlin.
Zentralblatt für Chirurgie. Leipzig.
Zentralblatt für Gynäkologie. Leipzig.

V 19

SUBJECT INDEX

This is an index to all the reading matter in THE JOURNAL. In the Current Medical Literature Department only the articles which have been abstracted are indexed.

The letters used to explain in which department the matter indexed appears are as follows: "BI," Bureau of Investigation; "E," Editorial; "C," Correspondence; "ME," Medical Economics; "ab," abstract; the star (*) indicates an original article in THE JOURNAL.

This is a subject index and one should, therefore, look for the subject word, with the following exceptions: "Book Notices," "Deaths," "Medicolegal Abstracts" and "Societies" are indexed under these titles at the end of the letters "B," "D," "M," and "S." State board examinations are entered under the general heading State Board Reports, and not under the names of the individual states. Matter pertaining to the Association is indexed under "American Medical Association." The name of the author, in brackets, follows the subject entry.

For author index see page 2108.

A

A. B. & S. Pill, case against, [Yonkman & Singh] *1931
A. C. H. Ku-Bill, 429—BI
ABBOTTS Vitamin D Milk, 1151
ABDOMEN: See also Ascites; Muscles, abdominal
abdominoscrotal hydrocele, [Roller] *671
acute allergic, [Gay] 287—ab
acute conditions in coronary disease, [Morrison] 375—ab
Adhesions: See Adhesions
bandages, zipper, [Pratt] *983
belts, Council on Physical Therapy requirements for advertising, 1946
binder for emphysema, [Meakins & Christie] *384
complications of phrenicectomy, [Longuet] 531—ab
laparotomy, gas bacillus infection complicates, [Nason] 1736—ab
pain in children, 2046
pains in childhood, [Guerstein] 792—ab
Paragonimus westermani involving, [Bercovitz] 714—ab
pressure within, regulation, [Salkin] 1483—ab
surgery, fever reaction after, 362
surgery in children, [Horsley] 1183—ab
surgery, omental grafts in, [Graham] 1982—ab
symptoms, differences in sensitivity, [Voegeli] 379—ab
symptoms (referred) in pulmonary tuberculosis, [Brown] 297—ab
syndromes in juvenile pneumonia, 1720
thick, [Rost] 77—ab
tumors, diagnosis by transvesical diaphanoscopy, [Klaften] 456—ab
tympany in subperitoneal hemorrhages, [Lenormant] 1185—ab
ABORTION between two periods, [Helm] 795—ab
contagious, testing cattle for Bang's disease, U. S., 1318
criminal, chiropractor sentenced for, 1075
criminal, responsibility of physician in relation to, 1866
sequels, study, 1248
sterility after, 1089
therapeutic, from standpoint of neurologist and psychiatrist, [Cheney] *1914
therapeutic, in cardiac conditions, [Pardee] *1899
therapeutic, in cardiovascular and renal disease, [Herrick] *1902
therapeutic, in pyelitis, [von Mikulicz-Radeckt] 1662—ab
therapeutic, in tuberculosis, [Pottenger] *1907
ABSCESS: See also under Brain; Liver; Lungs; Pelvis; Prostate; Ulcer
perinephric, roentgen diagnosis, [Shane] 526—ab
ABSORPTION: See Gastro-Intestinal Tract; Rectum
A-C Brand Strained Products, 111
ACACIA solution, preparing, indications for injecting, [Hartmann] *1352; *1353
ACADEMIC Assistance Council, to assist foreign scientists, England, 54; (report) 1864
ACADEMY: See also American; Missouri; Richmond; etc.
of Medical Sciences, Naples, 693
of Medical Sciences, Palermo, 694; 1081
of Medicine of Cleveland, 926; 1242; 1862
of Medicine, Turin, 273
of Sciences, France, favors urologists; Faure exception, 422
ACCIDENTS: See also Football injuries; Trauma; Workmen's Compensation Acts; Wounds, accidental
Automobile: See Automobile
fatal, study of, New Mexico, 762
Fourth of July, 922—E
Industrial: See Industrial
prevention, regulations, Japan, 1165
railway vs. road, 689
Road: See Automobile
ACCLIMATIZATION: See Climate
ACCOUNT STATED: See under Medicolegal Abstracts at end of Letter M
ACETARSONE Treatment: See Amebiasis
ACETPHENETIDIN intoxication, chronic, [Holst] 1110—ab
ACETYL - BETA - METHYLCHOLINE, intravenously, [Weiss] 1335—ab
Chloride: See Arthritis treatment
ACETYLCHOLINE, intravenously, [Weiss] 1335—ab
ACHLORHYDRIA: See Stomach acidity
ACHYLIA gastrica, 1464; 1465
gastrica in polyarthritis, [Molike] 1744—ab
ACID: See also under Medicolegal Abstracts at end of letter M
Acetylsalicylic: See also Chorea
acetylsalicylic, action on growing bone, [Mch] 138—ab
acetylsalicylic, antiphlogistic action, 1398
acetylsalicylic, aspirin and sodium bicarbonate incompatible, 861
acetylsalicylic, aspirin (Bayer), 119; 1161
Ascorbic: See Acid, cevitamic
barbituric, poisoning, strychnine injections for, 270
barbituric, preparations, fate in body, 623
Bile Acid Tolerance Test: See Liver function test
Boric: See Fistula, fecal
Cevitamic: See also Hemophilia; Scurvy
treatment
cevitamic, effect on dopa reaction, [Grüneberg] 1660—ab
cevitamic, solutions, parenterally, [Fisher & Leake] 1556—C
Citric: See Urine
Extract: See Pituitary Extract
Free: See Stomach acidity
Glutamic: See Dystrophy, muscular; etc.
hydrofluoric, effects, 280
in Urine: See Urine
Lactic: See Blood
metabolism in rheumatic children, [Payne] 1265—ab
Nitrohydrochloric: See Hay Fever
Oxalic: See also Blood; Urine
oxalic, and carbohydrate exchange vs. splenectomy, 693
oxalic, in metabolism, 1152—E
*tri*Sulphuric: See Trypanosomiasis
Tannic: See also Burns, treatment
tannic, may convey bacteria, [Martin] 711—ab
ACID-BASE EQUILIBRIUM in pregnancy, [Botella Llusiá] 1894—ab
ACIDITY, body, and carbohydrates, 701
Gastric: See Stomach
ACIDOPHILUS: See Bacillus
ACIDOSIS claims in advertising, Committee on Foods decision, 189
hypoglycemia and ketosis, [Sippe] 377—ab
of guanidine intoxication, [Minot] 1985—ab
Therapeutic: See Pyuria
ACNE eruptions of face: rôle of specific foods, [White] *1277
from chlorine exposure, Acoclor-1169, 1089
treatment, x-ray, 1473
vulgaris in adolescent, [Nichols] 1809—ab
ACROMEGALY, symptoms, changes, 120
ACTINOMYCES, anaerobic, 1791
ACTINOMYCOSIS, experimental production, 2039
of gallbladder, [Lino] 302—ab
of tongue, 362
treatment, [Pantus] *833; [Dyes] 1495—ab
treatment, vaccine, [Neuber] 305—ab
ADAMS-STOKES Attacks: See Heart block
ADDICTION: See Barbital; Codeine; Dilaudid; Morphine; Opium; etc.
ADDISON'S ANEMIA: See Anemia, Pernicious
ADDISON'S DISEASE, treatment, sodium chloride, [Touw] 1496—ab
ADENOCARCINOMA of prostate, [Dickson] 74—ab
ADENOMA: See also Cystadenoma; Fibroadenoma; Hidradenoma
basophil, of pituitary, [Russell] 1028—ab; [Medvel] 1030—ab
Malignant: See Adenocarcinoma
of adrenal; heterotopic parathyroid adenoma, [Bergstrand] 709—ab
ADENOPATHY: See Lymphatic System
ADEX Tablets, Squibb, 754
ADHESIONS, abdominal, pepsin prevents, [Yardumian] 868—ab
abdominal, peritoneal reaction to liquid petrolatum, [Norris & Davison] *1846
ADLER-KAPELLER Reaction: See Pregnancy diagnosis
ADNEXITIS: See Uterus
ADOLESCENCE, acne vulgaris in, [Nichols] 1809—ab
heart disease in, New York, [Goodman & Prescott] *157; 497
mastitis gargantuan, [Goodman] *335
mastitis in, [Harbeson] 373—ab
study of, fellowships for, at Yale, 1783
suicides, 2039
tonsils and mammary glands during puberty, [Peller] 1416—ab
ADOPTION practices, [Jenkins] *403
ADRENALIN: See Epinephrine
ADRENALS: See Suprarenals
ADVERTISING: See also under Medicolegal Abstracts at end of letter M
acidosis claims in, Committee on Foods decision, 189
American Honey Institute, 918
California Fruit Growers Exchange, 1379
California Prunes Educational, 1453
copy on patented lenses, [Cowan] *1377
father of, Balzac's Dr. Veron, 1463
leaflets, pharmaceutic firm peddles, 1635
of abdominal belts, corsets, and special supports, Council on Physical Therapy requirements, 1946
of sweets in diet, Committee on Foods General Decision, 110
salmon promotional, 1453
titles and degrees abolished in, Japan, 1553
vitamin E claims, Committee on Foods, decision, 189
AEROBES: See Bacteria
AEROCYSTOGRAPHY: See Bladder roentgen study
AEROPHAGIA, belching with, 778
AFRICAN Natives: See Negroes
AGAR-Agar Shreds-Reinschild, 917
nutrient, preparation, [Wright] 1739—ab
AGE of Pregnancy: See Pregnancy
Old: See Old Age
tuberculosis and, [Kalbfleisch] 1895—ab
AGGLUTINATION: See Bacteria Reaction; See under Arthritis
AGGLUTININ response to antienterica vaccination, [Stuart] 1739—ab
AIR Blower: See Electric
borne spread of scarlet fever, 1013
conditioned cabinet (Kettering hypertherm) for inducing fever, 1381—E
contaminations, 503
Force: See Aviation
high oxygen atmospheres and chronic cardiac insufficiency, [Richards] 951—ab
Injection: See Bladder roentgen study
Insufflation: See Epilepsy, treatment; Meningitis, cerebrospinal
Pilots: See Aviation
Pressure: See also Barometric Pressure; Oxygen pressure
pressure (intermittent negative) in obliterative endarteritis, etc. (Herrmann-Landis), 1562; [de Takáts] *1920
pressure (intrapulmonary) and blood pressure, [Adrio Mateo] 1575—ab
smoky atmosphere, evils, 1319
Swallowing: See Aerophagia
AIRCO Oxygen Therapy Regulator, 2028
AIRPLANE: See Aviation
ALAMEDA (COUNTY (Calif.) plan of caring for low income group, 997—ME
ALBUMINOID Reaction: See Cerebrospinal Fluid
ALBUMINURIA, persistent functional, [Burden] 1021—ab
pregnancy with, advisable, 1175
retinitis, pathogenesis, [Magitot] 1658—ab
ALCALIGENES faecalis: See Kidney calculus
Melitensis Infection: See Undulant Fever
ALCOHOL: See also Beer; Phenobarbital; Whisky
asphyxia from, [Henderson] *836

ALCOHOL—Continued
auto accidents and, [Heise] ★739; [Hindmarsh] 796—ab
beverages, use of in fever regimen, (reply), [Shattuck] 1376
Injection: See also Asthma, treatment; Pruritus
injection, intraspinal (subarachnoid), to control pain, [Saltzstein] ★242
liver function and, [Bauer] 1340—ab
pellagra, neuritis with, [Cobb & Corgeshall] ★1612
Treatment: See Lungs, suppuration
ALCOHOLISM, chronic, blood sugar in, [Maarssø] 226—ab
diagnosis, [Heise] ★739; [Hindmarsh] 796—ab
ALEUKEMIA: See Leukemia
ALIENISTS: See Psychiatrists
ALIMENTARY TRACT: See Gastro-Intestinal Tract
ALIZARIN Test: See Stomach secretion
ALKALI, effect on peptide of thyroxine from gastro-intestinal tract, [Thompson] 1985—ab
Reserve: See Blood
ALLEN-DOISY TEST, agent producing, [Engel] 722—ab
ALLERGY: See Anaphylaxis and Allergy; Milk; Tuberculosis; Wheat; etc.
ALLONAL, granulopenia after, [Stone & Margolis] ★1933
ALL-UNION Congress of Physiologists, Biochemists and Pharmacologists (fifth), 1552
ALOPECIA areata, 775; 1473
areata in 11 year old girl, 1727
progressive, 856
ALPHA-LAC, 189
ALTHERM Eye Pad, 563
ALTITUDE, respiratory response to, 1781—E
ALUM industry, hazards, 1971
Precipitated Toxoid: See under Diphtheria; Tetanus
ALUMINUM Hydroxide: See Peptic Ulcer treatment
kettle, removing lime from, 1399
paint, industrial hazard, 128
rôle in cancer production, 1719
AMAUROSIS from ethylhydrocupreine, [Griffey] 527—ab
AMBULANCE, American, of Neuilly, memorial, 1389
AMEBIASIS, 63; 1791
A. M. A. symposium on, Cleveland Session, [Craig] ★1061; [Simon] ★1063; [McCoy & Chesley] ★1145; [Lynch] ★1147; [Meleney] ★1213; [Magath] ★1218; [Reed] ★1224
carrier problem, [McCoy & Chesley] ★1146
complications and prolonged influences, [Lynch] ★1147
control of infection source and transmission, [McCoy & Chesley] ★1145
diagnosis, clinical, [Simon] ★1063
diagnosis, complement fixation test, [Weiss] 521—ab
diagnosis, laboratory, [Magath] ★1218
diagnosis, simple sigmoidoscopic aspirator, [Fradkin] ★21
epidemiology, [Craig] ★1061
experimental, desiccated hog stomach, liver extract and raw liver in, [Faust] 214—ab
Hepatic: See Liver
in Paris, 1079
McCoy, dietary quack discusses, 347—E
pathology, [Meleney] ★1213
prevention, removing Endamoeba histolytica cysts from water by filtration, 348—E
roentgen study of colon, [Ikeda] 73—ab
rôle in liver cirrhosis, [Yenikomshian] ★660
treatment, [Reed] ★1224 (correction) 1547
treatment, carbarsone, [Anderson] 214—ab; (Council report) 258; (N. N. R.) 259
treatment, toxic effects of emetine hydrochloride, [Shattuck] 1376
treatment, untoward effects of emetine hydrochloride, acetarsone, carbarsone, chiniofon, vioform, bismuth subcarbonate, hexylresorcinol, [Anderson] 214—ab
AMENORRHEA, 1011
treatment, ovary extract, [Stanca] 1897—ab
AMERICAN: For Societies whose name begins with American see also list of Societies at end of letter S
Academy of Arts and Sciences, grants for research, 1957
Academy of Ophthalmology and Otolaryngology, 764; 928
Ambulance: See Ambulance
Antivivisection Society misrepresents editorial in the JOURNAL, 612—E
Association for Advancement of Science, 52; 1958
Association for Cancer Research, 1317
Association for Labor Legislation, 1858—E
Association for Study and Control of Rheumatic Diseases: (abstract of proceedings), 1732; 1801; 1883; (purposes) [Irons] 1732—ab
Association for Study of Goiter prize, 1863
Association of Obstetricians, Gynecologists and Abdominal Surgeons, 688
Association of Railway Surgeons, 688
Board of Dermatology and Syphilology, (diplomates), [Lane] ★541; (examination) 269; 1317

AMERICAN—Continued
Board of Gastro-Enterology membership, A. M. A. resolution on, 44
Board of Otolaryngology examination, 118; 1161; 1957
Board of Proctology, A. M. A. resolution on, 44
Board of Psychiatry and Neurology organized, 1547; 1717
Brand Golden Syrup, 342
College of Surgeons, 1076
Congress of Physical Therapy, 498
Honey Institute, advertising, 918
Hospital (Neuilly): See Hospitals
influence in Japan, 1322
Lady Pineapple Juice, 919
Legion award citation to William and Charles Mayo, 416—E; 496
MEDICAL DIRECTORY, ★578; 611—E; (aged physicians) 1782—E
Medical Golfing Association, 1457
Radium Society resolution condemns indiscriminate use of radium, 1077
Red Cross: See Red Cross
Roentgen Ray Society, 846
Social Hygiene Association withdraws sponsorship, 1387
Urological Association, 1317
AMERICAN MEDICAL ASSOCIATION
AMERICAN MEDICAL DIRECTORY, ★578; 611—E; (aged physicians) 1782—E
Annual Conference of State Secretaries, 843
Annual Congress on Medical Education and Medical Licensure (tentative program for 1935) 1713
Atlantic City Session, 1239; 1710—E; 1627; 1783; 1953
Board of Trustees (abstract of minutes), 1239
Canadian Medical Association to meet with, Atlantic City, 1710—E
Chemical Laboratory report on Sterilometer and Aseptic-Thermo Indicator, 1621
Committee on Awards, report, Cleveland Session, 47
Committee on Definition of Blindness, report, [Jackson & others] ★1445
Committee on Economic Security and, 1454—E; 1543; 1624—E; 1627
Committee on Foods, (General Decisions) 29; 110; 189; 681; 1452; (rule on special purpose foods) 755
Committee on Scientific Research, grants available, 1953
Council on Medical Education and Hospitals (business meeting) 48; 1543; (resurvey of medical schools) ★565; 612—E; (educational data) ★565; (schools offering graduate courses) ★587; (hospitals approved) ★588; ★1477; 1476; (physicians specializing in pathology) ★1230
Council on Pharmacy and Chemistry reports (sterility of ampule preparations) 678; 683—E; (Coley toxins) 1067; 1070—E; (Scarlet Red Salve) 1778
Council on Physical Therapy reports, (infrared ray therapy); 27 (hyperpyrexia produced by physical agents) 1308; (report of work) 1706
exhibit at Century of Progress, Museum of Science and Industry requests, 1239
Exhibit on Diabetes, Atlantic City Session, 1953
Exhibit on Nutrition, Atlantic City Session, 1953
Exhibit on Vaccines and Serums, Atlantic City Session, 1953
headquarters activities, motion picture, 1154—E
hospitalization of mentally ill, 1457—E
House of Delegates, group picture, Cleveland Session, 22
JOURNAL editorial, American Antivivisection Society misrepresents, 612—E
Local Committee on Arrangements, chairman, Atlantic City, 1239
Officers, group picture, Cleveland Session, 22
Proceedings of Cleveland Session, 33
radio talks, express appreciation to N. B. C., 1239
representatives at International Congress on Dermatology, 40
resolution on American Board of Gastro-Enterology membership, 44
resolution on American Board of Proctology, 44
resolution on dosage for infants in U. S. Pharmacopeia X, 38
resolution on exploitation of radiologists by hospitals, 45
resolution on formation of board of examiners in pathology, 39
resolution on hospitals employing optometrists, 35
resolution on ophthalmic service in registered hospitals, 1544
resolution on recognition of specialists, 1544
resolution on Section on Radiology inviting International Congress of Radiology, 45
resolution on state societies in offering graduate courses, 1544
resolution on survey of radiologic departments of hospitals, 45
Scientific Exhibit, Atlantic City Session (application for space) 1627 (Section exhibits) 1783; (special exhibits) 1953

AMERICAN MEDICAL ASSOCIATION—Continued
Scientific Exhibit, Cleveland Session, 46; (awards) 47
Section on Dermatology and Syphilology, minutes, 40
Section on Gastro-Enterology and Proctology, minutes, 44
Section on Laryngology, Otology and Rhinology, minutes, 36
Section on Miscellaneous Topics, minutes, 46
Section on Nervous and Mental Diseases, minutes, 39
Section on Obstetrics, Gynecology and Abdominal Surgery, minutes, 34
Section on Ophthalmology, minutes, 35
Section on Orthopedic Surgery, minutes, 43
Section on Pathology and Physiology, minutes, 39
Section on Pediatrics, minutes, 37
Section on Pharmacology and Therapeutics, minutes, 38
Section on Practice of Medicine, minutes, 33
Section on Preventive and Industrial Medicine and Public Health, minutes, 41
Section on Radiology, minutes, 45
Section on Surgery, General and Abdominal (minutes) 33; (invitation to contributors) 1157
Section on Urology, minutes, 42
Sections exhibits, Atlantic City Session, 1783
Sections, minutes, Cleveland Session, 33
Session on Forensic Medicine, 46
Session on Nutrition, minutes, 46
solicitor, unauthorized, James Cooper, 763
Symposium on Amebiasis: See Amebiasis
Woman's Auxiliary, 32—E; 763; 1161
AMIDOPYRINE: See also Allonal
agranulocytic angina from, [Benjamin & Biederman] ★161; [Rawls] 370—ab; [Groen] 796—ab; [Fitz-Hugh] 1099—ab; [Plum] 1268—ab; [Johnson] ★1299; [Herz] 1888—ab
warning about, 1787
AMINO-ACID Treatment: See Dystrophy, muscular; Muscles, disorders
AMMONIA in Blood: See Blood
AMNION, habitual hydramnion, [Beaufays] 794—ab
AMNIOTIC FLUID, source, 126
AMNIOTIN Treatment: See Gonorrhea
AMPULE preparations, sterility, Council report, 678; 683—E
AMPUTATION: See also Breast surgery
estimating basal metabolism in patient with, 860
gas bacillus infection after, [Orr] 710—ab
painful stump after, 1011
AMSTERDAM Dairy Vitamin D Milk, 2029
AMYL NITRITE: See Retinitis pigmentosa; Thrombosis, coronary
AMYLASE in Blood: See Blood
AMYLOIDOSIS of bone marrow, [Gerber] 70—ab
of skin and muscles, [Michelson] 372—ab
AMYTAL, Sodium: See Mental Disease
ANAEROBES: See Actinomyces; Diphtheria bacillus; Streptococcus
ANALGESICS: See also Benzylephedrine; Diludadid
antiphlogistic action, 1398
ANAPHYLAXIS AND ALLERGY: See also Asthma; Dermatitis; Eczema; Hay Fever; Milk; Skin; Tuberculosis; Wheat
acute allergic abdomen, [Gay] 287—ab
atopy as cause of epilepsy, [Forman] 1484—ab
capillaroscopic studies, [Hantschmann] 1897—ab
cold allergy, [Paul] ★24; 996—E; [Feinberg] 1725—C
cottonseed allergy, [Taub] ★334
cytology of secretions in, [Hansel] 137—ab
dermatologists need deeper knowledge of, [Mitchell] 1556—C
desensitization to gasoline, 279
eosinophilia in, [Knott] 377—ab
light sensitive dermatoses, [Anderson & Ayres] ★1279
nasal allergy, [Withers] 290—ab
physical allergy, 996—E (early references) [Feinberg] 1725—C; 2048
pregnancy, vasomotor rhinitis and, 1471
rôle in arthritis, [Irons] ★1582
rôle in nasal mucous polyps, [Kern & Schenck] ★1293
sensitivity to blood be induced? 279
sensitivity to dinitrophenol, determined by skin tests? [Matzgen] ★253
sensitivity to liver preparations, [Grün] 454—ab
sensitivity to milk and cream, 360
sensitivity to pin oak, 1397
sensitivity to sunlight, 279
sensitization tests in dermatology, [Mendelsohn] 372—ab
serum disease, treatment, [Buzello] 1415—ab
serum injection, fatal, (auto-anaphylaxis, isoanaphylaxis), 192—E; (reply) [Sokol] 622—C
serum injection, paralysis after, [Hahn] 1659—ab

ANAPHYLAXIS AND ALLERGY—Continued
serum sensitization, 1475
shock (fatal) from Lashlure, [Forbes & Blake] *1441
skin testing in, [Rinkel] 287—ab
ANASTOMOSIS: See Bile Ducts; Intestines; Stomach; Ureters
ANCYLOSTOMIASIS: See Hookworm Infestation
ANDES, 429—BI
ANDROTIN, sex hormone extracted from urine, [McCullagh & Renshaw] *1140
ANEMIA: See also Anemia, Pernicious
after stomach operation, [Dedichen] 150—ab; 1464
colitis in relation to, [Hare] 950—ab
Cooley's, [Moncrieff] 1740—ab
hemoglobin regeneration, 192—E; [Patek] 1021—ab
hemolytic, hepatic cirrhosis with, [Hijmans Van Den Bergh] 1496—ab
hemolytic, with nocturnal hemoglobinuria, [Iglauer] 381—ab
hookworm, treatment, [Rhoads] 1567—ab
hypochromic, bile pigment in, [Patek] 1021—ab
iron-deficiency, [Schur] 1997—ab
iron-deficiency, diagnosis, treatment, [Bethell & others] *797
nutritional, of infancy compared with microcytic anemia of pregnancy, [Steen] 1657—ab
of Pregnancy: See Pregnancy
recent developments in, 273
secondary, copper and iron in, [Cason] 138—ab
treatment, 1790
treatment, copper, [Rohland] 1818—ab
treatment, copper-iron [Machold] 225—ab
treatment, iron, 513
treatment, iron, hurt teeth? 282
tropical macrocytic, 499
ANEMIA, PERNICIOUS, gastro-intestinal tract rôle in, [Strauss] *1
nature, Adams' summary, 1712—E
nerve involvement, 127
nervous system in, 1169
neurologic changes, treatment, [Goldhamer & others] *1663
psychoses in, 1529—ab
treated with liver, leukemoid form, of remission of, [Brugsch] 1031—ab
treatment, Adams' review, 1712—E
treatment, liver, assay of commercial extracts, [Dameshek & Castle] *802
treatment, liver extract (human), [Wilkinson] 951—ab
treatment, liver hematopoietic hormone, 1081
treatment, liver, Nobel prize for, 1382—E; 1387
treatment, stomach extract, [Etienne] 378—ab
treatment, yeast (brewers'), [Russell] 69—ab
treatment, yeast or vitamin B_2, [Lassen] 1735—ab
ANESTHESIA: See also under Medicolegal Abstracts at end of letter M
barbiturates (sodium ipral) safe premedicant, [Gwathmey] *1536
*tri*brom-ethanol, for goiter operations, [Keynes] 141—ab
*tri*brom-ethanol, sequels in children born during, [Wahl] 223—ab
caudal block, 623
chloroform scopolamine amnesia in labor, [Clark] 1490—ab
cyclopropane, [Waters & Schmidt] *975
death (sudden) under, and carotid sinus, [Downs] 711—ab
depression, [Henderson] *834
dial-urethane for obstetric analgesia, [Brown] 1810—ab
dilaudid-scopolamine in obstetrics, [Ruch] 68—ab
Diothane, N. N. R., 1777
general, paraldehyde by rectum before, [Whigham] 951—ab
local, applied to stellate ganglion, 618
local, hematoma after tooth extraction under, 857
local, hyperglycemia and ketonuria after, [Calzolari] 77—ab
local, innervation of dental pulp, 1092
local, mouth infection after, 1472
local, nupercaine and toxicity of, 857
parasacral, in obstetrics, [Tucker] 522—ab
procaine hydrochloride, subarachnoid space during, [Vehrs] 1336—ab
spinal, Ampoules Procaine Hydrochloride Solution, 1067
spinal, arterial hypotension in, [Angelesco] 876—ab
spinal, cephalalgia after, [Zappalà] 720—ab
spinal, danger in cesarean operation, [Franken] 1578—ab
spinal, in children, 1172
spinal, in urology, [Foulds] 72—ab
spinal, overdosage, [Zabin] 507—C
spinal, Sterile Ampules Procaine Hydrochloride-Squibb, 1708
ANEURYSM, aortic (dissecting), coronary thrombosis mistaken for, [White & others] *1135
aortic, roentgenkymography, 1247
ANEURYSM—Continued
aortic (thoracic) saccular, roentgen sign, [Burvill-Holmes] 1890—ab
arterial, sympathetic ganglion block in, [Gage] 371—ab
carotid-jugular (internal), thorium dioxide sol localizes, [Terry & Mysel] *1036
innominate, proximal ligature for, [Souttar] 449—ab
intracranial, 913
intracranial, diagnosis, 179—ab
intracranial, rupture, symptoms, 408—ab
popliteal, [Dunbar] 1573—ab
ANGEL'S HAIR: See Glass, spun
ANGINA, agranulocytic, acute pemphigus in granulocytopenia, [Fiala] 1983—ab
agranulocytic, after amidopyrine, [Benjamin & Biederman] *161; [Rawls] 370—ab; [Plum] 1268—ab; [Johnson] *1299; [Herz] 1888—ab
agranulocytic, after cibalgine, [Johnson] *1299
agranulocytic, after dinitrophenol, [Bohn] *249; [Silver] *1053
agranulocytic, after dinitrophenol, pentnucleotide and leukocyte cream for, [Davidson & Shapiro] *480
agranulocytic, benzene poisoning with, 1560
agranulocytic, complicating kala-azar, [Zia] 1979—ab
agranulocytic, due to drugs [Groen] 796—ab; [Fitz-Hugh] 1099—ab
agranulocytic, fall to produce with toxins, [Meyer] 71—ab
agranulocytic, granulopenia after Allonal, [Stone & Margolis] *1933
agranulocytic leukopenia, treated with x-rays, [Benjamin & Biederman] *161
agranulocytic, liver therapy in granulocytopenia, [von Bonsdorff] 226—ab, 1030—ab
agranulocytic, pentnucleotide for, [Wilkinson] 1184—ab
Vincent's, of mucous membranes, 1327
ANGINA PECTORIS: See also Pseudo-Angina Pectoris
electrocardiographic changes, [Gray] 142—ab
etiology, cigaret smoking, [Wright & Moffat] *318
etiology; foam thrombosis, [Löffler] 1896—ab
etiology, oxygen insufficiency in cardiac muscle [von Bergmann] 1576—ab
exercise tolerance test for, [Riseman] 1979—ab
heart pain and, 1171
length of life from onset, [Viko] *554
pain, 433; 1080
syphilitic stricture of coronary ostia, [van Muijden] 454—ab
thyroidectomy in, [Welnstein] 369—ab; [Brenner] 1810—ab
treatment, atropine, [Scherf] 1743—ab
treatment, cardiac hormones, [Lyter] 287—ab
treatment, division of thyroid arteries, [Horgan] 139—ab
treatment, strophanthin, [Edens] 1743—ab
ANGIOMA, facial and meningeal, [Krabbe] 1653—ab
hereditary, in two Danish families, [Yde] 1810—ab
ANILINE dermatitis from green food coloring, [Baer] *10
fatality from Lashlure, [Forbes & Blake] *1441
poisoning, blood changes, [Gaeta] 721—ab
ANIMAL: See also Cats; Dogs; Foxes; Squirrels; etc
Charcoal: See Infections, treatment
susceptibility to gonorrhea infection, 1399
ANIMAL EXPERIMENTATION, American Anti-vivisection Society misrepresents JOURNAL editorial, 612—E
in Germany, 1005
ANKLE, edema, during menstruation, 1255
edema, etiology, 2048
ANKYLOSIS: See Joints
ANKYLOSTOMIASIS: See Hookworm Infestation
ANNA DALE Brand Evaporated Milk, 29
ANOMALIES: See Urethra; Urinary Tract; etc
ANOREXIA: See Appetite
ANOXEMIA: See Blood oxygen
ANTHRACOSIS: See Pneumonoconiosis; under Medicolegal Abstracts at end of letter M
ANTHRAX, danger from shaving brushes, (England) 1003; (Australia) 1870
in brush factory employee, 351
therapy, [Fantus] *915
ANTHROPOLOGY, international committee for standardization of methods, 1081
Jewish population in Vienna from standpoint of, 356
ANTIBODIES, cytoplasmic, 922—E
formation after extirpating antigen depot, [Cannon] 1101—ab
nature, 1380—E
skin as source of, 1876
Test: See Leukemia
ANTIGEN: See also Lymphogranuloma inguinale; Typhoid bacillus
depot extirpation, antibody formation after, [Cannon] 1101—ab
ANTIGEN—Continued
relationship between brucella and pasteurella, pfeifferella and proteus organisms, [Wilson] 1992—ab
Therapy: See Gonorrhea
ANTIHORMONES, 492—E
resistance of thyroid to, 1456—E
ANTIMONY poisoning from enamel ware, 54
ANTIPERISTALSIS: See Intestines; Stomach
ANTIPYRINE, agranulocytosis from, [Groen] 796—ab
ANTISEPTICS, Antiseptic Konolds, 204—BI
in chronic maxillary sinusitis, 702
ANTISTREPTOCOCCUS Serum: See Streptococcus
ANTITOXIN: See Rheumatism; Scarlet Fever
ANTIVIRUS therapy (Besredka), [Eaton & Bayne-Jones] *1937
ANTUITRIN G treatment of dwarfism, [Engelbach & Schaefer] *464
S, effect on hypopituitarism, [Kunstadter] 445—ab
S for maldescent of testicle, [Cohn] *103; 1877
S in breast atrophy, 1796
ANURIA: See Urine, suppression
ANUS: See Rectum
Fistula: See Fistula
Pruritus: See Pruritus
AORTA, abdominal, intermittent dilatation, [Högler] 1661—ab
Aneurysm: See Aneurysm
ascending, suture of wound, [Bialock] *1617
coarctation, [Pierce] *830; [Flaxman] 1395—C (reply) [Pierce] 1395—C; [Hardaway] 1488—ab
AORTIC VALVE, regurgitation, terminal event in, 1014
stenosis, 616—E
APHTHAE resistentia: See Stomatitis
APIOL, polyneuritis from, [Smith] 2045—C
APPARATUS: See also Automobile jack
electric air blower method of drying wounds, [Burton] *338
foot examining stand, [Diveley] *1511
for detection of free acid [Necheles & Scheman] *107
for determining basal metabolism, 513
for inducing fever with Kettering hypertherm, 1381—E
four gm. radium pack, [Cutler] *1209
Jones Motor-Basal, 1620
rotor that disperses blood cells, [Bryan & Garrey] *1059
APPENDICITIS, amebic, [Lynch] *1149
campaign against, Pennsylvania, 846
chronic, 1326
chronic, congenital pericolic membrane syndrome misnamed, [Bueermann] 135—ab
complicating otitis media, 1252
complications, peritonitis, treatment, [Coller & Potter] *1753
diagnosis, posture change in, 703
gangrenous, prognostic importance of black vomit, [Melchior] 1109—ab
gangrenous, surgical indications, 2049
perforated, management, [Gile & Bowler] *1750
study of, by New York Academy, 1785
APPENDIX, bacteriologic relations to oral cavity, 1867
cecal polyp on occluded base, [Strauss] *182
periduodenitis of appendicular origin, [Kadrnka] 144—ab
roentgenoscopy, [Krenn] 535—ab
ruptured, peptone broth in, [Feagles] 527—ab
tumors, argentaffine, [Topa] 144—ab
APPETITE stimulating property of liver, [Johnson] 1408—ab
treatment of anorexia in children, [Bernheim-Karrer] 1813—ab
APPLE Diet: See Colitis; Diarrhea
APPROVAL Tomato Juice, 1379
APRICOTS, Cellu Juice-Pak, 755
ARACHNITIS, chronic circumscribed, [Gordin] 1898—ab
ARCHES, Fallen: See under Foot
ARCUS senilis in colored race, 939
ARDEN Vitamin D Milk, 341
ARGENTAFFINE tumors of appendix, [Topa] 144—ab
ARGYREMIA: See Blood silver
ARGYRIA, detection by demonstrating high blood silver, [Blumberg & Carey] *1521
nasalis, [Monson] 69—ab
of uterus cervix, [Dworzak] 955—ab
ARISTO Brand Strained Products, 111
ARIUM, 205—BI
ARM: See also Elbow; Extremities; Fingers; Hand; Wrist
numbness, 1091
ARMPIT: See Axilla
ARMSTRONG'S Granular Effervescent Lithia Compound, 205—BI
ARMY: See also Military; Soldiers; Veterans; War
French, tuberculosis in, 1244
Italian, health, 503
medical corps importance in war, 1006
U. S., change in typhoid-paratyphoid vaccine, 197
U. S., lectures, 1458

ARMY—Continued
U. S., Medical Corps, examinations for appointment, 119
U. S., Medical Corps, rear admirals in, 1958
U. S., medical R. O. T. C. units discontinued, 1077
ARRHENOBLASTOMA, special position, [Kleine] 1266—ab
ARROWHEAD Soft Spring Water, 261
ARSENIC Gold Treatment: See Lupus erythematosus
in brain, relation to pericapillary hemorrhages, [Osterberg] 709—ab
keratbses and carcinomas, [Franseen] 1885—ab
optic inflammation and, 940
resorption and elimination, [Leibowitz] 1893—ab; 2058—ab
tolerance for, in foods, Committee on Foods reports, 29
ARSPHENAMINE: See also Neoarsphenamine; Sulpharsphenamine
dermatitis (exfoliative), [Zolezzi] 145—ab
dosage (large) for those overnourished with carbohydrates and subjected to insulin, 273
free, for indigents, Indiana, 613
hurt the teeth? 282
sensitization, patch tests in, [Robinson] 1656—ab
Treatment: See Syphilis
ART exhibit, New Jersey, 51
Haden Etching Club exhibit, New York City, 815
science and, distinction, 1847—ab
ARTERIES: See also Aneurysm; Arteritis; Endarteritis
Carotid: See also Aneurysm; Sympathectomy, pericarotid
Coronary: See also Angina Pectoris; Endarteritis; Thrombosis, coronary
coronary disease, in acute abdomen, [Morrison] 375—ab
coronary flow, measuring directly, Rein's technic, 1080
coronary occlusion (acute), oxygen treatment, [Barach & Levy] ★1690
coronary ostia, syphilitic stricture, [van Muijden] 454—ab
Innominate: See Aneurysm
Lumbar Segmental: See Arteriosclerosis
mesenteric, occlusion, [Dunphy] 1737—ab
oscillometric curves, plateau form, [Vaquez] 301—ab
peripheral, patency, [Formijne] 1805—ab
Popliteal: See Aneurysm
Pulmonary: See also Endarteritis
pulmonary, sudden occlusion effect on cardiac output, [Moore] 1024—ab
puncture to determine blood pressure, [Wolf] 723—ab
puncture to obtain mixed venous blood, [Friedman] 525—ab
thyroid, division in angina pectoris, [Horgan] 139—ab
Uterine, Ligation: See Uterus hemorrhage
ARTERIOSCLEROSIS, diabetes and tuberculosis, 1360
effect on area of histamine flares, [Ernstene] 292—ab
eggs and milk and, 639—ab
heart disease, mortality, [Stone] ★153
heart disease, prognosis in, [Viko] ★553
hemorrhages with, 2049
hypertension and, 1794
in Vienna, 1247
obliterans, pavaex apparatus for, [de Takáts] ★1921
of lumbar segmental arteries, [Reichert] 370—ab
therapeutic abortion in, [Herrick] ★1902
ARTERITIS: See also Endarteritis
obliterative, suprarenalectomy in, [Leibovici] 1812—ab
polyarteritis nodosa, [Halning] 291—ab
rheumatic, [Harbitz] 1416—ab
ARTHRITIS: See also Rheumatism
acute, in children, [Kaiser] ★886
acute infective, of knee, treatment, [Mouat] 376—ab
American Association for Study and Control of Rheumatic Diseases, abstract of proceedings, 1732; 1801; 1883
atrophic, management, [Holbrook & Hill] 1802—ab
barbituric, [Castin] 1813—ab
chronic, agglutination reactions in [Dawson] 1906—ab
chronic, Heberden's node, 1092
chronic, medical treatment; bath formula, etc., [Cecil] ★1583
chronic, metabolic and nutritional aspect, [Pemberton] 1481—ab
chronic, nutritional factors in, [Sladen & others] 1734—ab
chronic, orthopedic and physical therapeutics, [Swaim] ★1589
chronic, peripheral blood circulation in, [Kovacs] 1803—ab
chronic proliferative, of children, care of joints in, [Ober & Green] 1801—ab
ARTHRITIS—Continued
chronic rheumatoid, skin reaction basis for streptococcus vaccine, [Wainwright] ★1357; 1733—ab
chronic: serologic and clinical studies, [Cox] 524—ab
chronic, treatment, [Irons] ★1579; 1732—ab
chronic, various types, roentgenologic changes, [Taylor & others] 1884—ab
complications, diabetes mellitus, 1089
diagnosis, differential, 777
etiology, paratyphoid bacilli, [Ruiz Gijon] 1413—ab
gonorrheal, complement fixation test in, [Myers] 784—ab
gonorrheal, synovial fluid in, [Myers] 1263—ab
infection (focal) and, [Steindler] 1732—ab
infectious, histologic changes in knee joint, [Keefer] 1100—ab
metabolism (calcium and cholesterol) in, [Hartung] 1884—ab
parathyroids and osteitis fibrosa cystica, [Ficacci] 952—ab
polyarthritis, acute, [Motzfeldt] 1032—ab
polyarthritis, diathermy and histamine in, [Dzsinich] 1415—ab
polyarthritis, gastric achylia in, [Moltke] 1744—ab
polyarthritis, hip joints involved in, [Kienböck] 792—ab
reticulo-endothelial rôle in deposit of colloids, etc., [Kuhns & Wetherford] 1883—ab
suppurative, of knee, treatment, 1550
tissue swelling in, diet vs. reduction, [Scull & Pemberton] 1803—ab
Treatment: See also Arthritis, chronic
treatment, calcium ortho-iodoxybenzoate, [Wiseldon] 417—ab
treatment, histamine, [Kling] 786—ab
treatment, iontophoresis of acetyl-beta-methylcholine chloride (mecholin) [Kovacs] 631—ab; 1803—ab (discussion) 1804—ab
treatment, paraffin bath method, 859
treatment, parathyroid extract; artificial fever, 1172
treatment, roentgen, of ankylopoietic spondylarthritis, [Haenisch] 1494—ab
Tuberculous: See also Hip Joint; Knee; Rheumatism
tuberculous, congo red test of reticulo-endothelial system, [Rabboni] 532—ab
ARTHUS PHENOMENON, [Ross] ★563
ARYAN and Nordic myths, 764
ASCARIASIS, surgical complications, [Virgillo] 1741—ab
treatment, hexylresorcinol, oil of chenopodium and santonin, [Brown] ★654; ★655
ASCHHEIM ZONDEK TEST: See Chorio-Epithelioma; Pregnancy diagnosis
ASCHOFF BODY: See Rheumatic Fever
ASCITES, drainage, vascular response to, [Brams] 444—ab
examination with cystodiaphanoscopy in, [Klaften] 1992—ab
ovarian carcinoma with, 1475
treatment, calcium chloride in large doses, [Gurevich] 1898—ab
ASCOLI Reaction: See Tumors, diagnosis
ASCORBIC Acid: See Acid, cevitamic
ASEPTIC-Thermo Indicator, 1621
ASH, precipitator or "fly ash," peritoneal tissue [Schrader & others] ★910; ★911
ASPERGILLOSIS, pulmonary, and bronchial cancer, [Kamppmeler] 1180—ab
ASPHALT, vapors, toxicity, 1013
ASPHYXIA: See also Carbon Monoxide poisoning
of new-born, [Henderson] ★834
of new-born, Foregger Infant Resuscitation Outfit, 677
resuscitation, [Henderson] ★750
ASPIDIUM (male fern): See Tapeworm Infestation
ASPIRATION: See Barium; Oil
Biopsy: See Biopsy
ASPIRATOR, simple sigmoidoscopic, [Fradkin] ★21
ASSOCIATION: See also under Societies at end of letter S
générale des médecine de France, 271
of American Medical Colleges, 1161
ASTHENIA, treatment, Bucky's borderline rays, [Backmund] 794—ab
ASTHMA: See also under Medicolegal Abstracts at end of letter M
attack during coitus, 626
blood eosinophilia in, determining, [Friedman] ★1618
etiology, dust of New Mexico range moth caterpillar, [Randolph] ★560
etiology, molds, [Prince] 1571—ab
hyperesthetic rhinitis with; hypersensitivity, 1251
in saxophone player, 1643
nostrum, Tucker's Asthma Specific, 1728
reactions to pollen extract injections, 60
research, Chicago, 495
Research Council report, 2038
tonsillectomy in, 514
treatment, dextrose intravenously, [Lepak] 1102—ab
ASTHMA—Continued
treatment, dorsal perisympathetic alcohol injection, [Levin] 1028—ab
treatment, ionization, [Warwick] 788—ab
treatment, ketogenic diet, [Montagnini] 720—ab
treatment, viosterol, [Rappaport] 1486—ab
trichlorethylene vapor aggravate? 279
tuberculosis and, [Bray] 1410—ab; [Fraenkel] 1573—ab
ASYLUMS: See Hospitals, psychiatric
ATELECTASIS: See Lungs, collapse
ATHLETICS, activity and oxygen inhalation, 32—E
football injuries, [Horan] ★325
tennis elbow, [Boshamer] 305—ab
why Cambridge wins boat race, value of sugar, 690
ATLANTIC CITY SESSION: See American Medical Association
ATMOSPHERE: See Air
ATOPY: See Anaphylaxis and Allergy; Eczema
ATROPHY: See also Arthritis, atrophic; Bone; Breast; Liver, acute yellow atrophy
muscular, amino-acid therapy (glycine, glutamic acid), [Tripoli & others] ★1595
muscular, early infantile progressive spinal, [Schildknecht] 1414—ab
muscular, in superior pulmonary sulcus tumor, [Jacox] ★84
Optic: See Nerve, optic
Sclerotic: See Cerebellum
ATROPINE: See also Angina Pectoris
tolerance in infants, [Pilcher] 1808—ab
AURICULAR FIBRILLATION after goiter operations, [Ernstene] 1261—ab
paroxysmal, 698
AURORA Brand Pineapple, 1151
AURRICHIO-CHIEFFI Reaction: See Leishmaniosis
AUTHORS: See Writers
AUTO-ANAPHYLAXIS: See Anaphylaxis and Allergy
AUTOCEREBROSPINAL Fluid Therapy: See Poliomyelitis
AUTOHEMOTHERAPY: See Hemotherapy
AUTOLYSATE: See Verruca
AUTOMOBILE, accidents and alcohol, [Heise] ★739; [Hindmarsh] 796—ab
accidents, fatal, increase, Illinois, 116
accidents, fatal, large city without, Sunderland, England, 928
accidents, fatal, U. S., 269; 616; 1317
accidents increase 16 per cent, U. S., 1786
accidents, paying physicians for, England, 199; 2038
accidents, prevention, England, 1077
accidents, safety lanes, London, 1162; 1632
accidents, toll of roads, England, 422
accidents vs. railway, 689
compulsory inspection, Tennessee, 419
exhaust gases, 850
fraudulent motor club memberships, 50
horns, restrict use, England, 1002
jack for fractured spine, [Ryerson] ★562
making motor cars less noisy, England, 269
motorized units in open warfare, 1006
AUTOPSY: See Necropsy; Medicolegal Abstracts at end of letter M
AUTO-UROTHERAPY: See Urine, therapeutic use
AVERTIN: See Anesthesia, *tri*brom-ethanol
AVIATION, international sanitary control of aerial navigation, 1244
medical service, Australia, 1388
medical service of air force, England, 499
pilots, examination, laboratory for, France, 1004
pilots, eye examination, England, 1632
regulations on infectious diseases, 1244
survey of pollen, Philadelphia, 1076
AVITAMINOSIS: See Vitamins
AVONDALE Farms Vitamin D Milk, 1069
AXILLA, mycotic dermatitis, 1398
AZOOSPERMIA: See Spermatozoa

B

BACHMANN Reaction: See Syphilis serodiagnosis
BACILLEMIA: See also Bacteremia; Septicemia; Tubercle Bacillus
in nontuberculous diseases, Loewenstein method, 1960
BACILLURIA: See Tubercle Bacillus
BACILLUS: See also Bacteria; Bacterium; Tubercle Bacillus
Acidophilus Bacillus Liquid-Mulford and Mulford Acidophilus Bacillus Blocks, 1947
acidophilus milk, Supplee, 1708
Alkalescens (Andrewes): See also Bacteremia
alkalescens variant of B. typhosus, [Gilbert] 213—ab
antigenic relationship between brucella and pasteurella, pfeifferella and proteus organisms, [Wilson] 1992—ab
Botulinus Infection: See Botulism
colon, infections, Congress on, 2039
colon, medium in presumptive tests, [Horwood] 1101—ab
colon, septicemia, bacteriophage for, [MacNeal] 2056—ab

BACILLUS—Continued
colon, postgonorrheal infections, 1327
crassus in acute vulva ulcer, [Talalov] 1807—ab
culture, preparation of nutrient agar, [Wright] 1739—ab
Enteritidis Meningitis: See Meningitis
Fusiformis: See Spirochetosis
paracolon, in enteral diseases of children, [Hassmann] 1817—ab
pseudocarolinus, dysentery produced by, [Chopra] 299—ab
Typhosus: See Typhoid
welchii (gas) infection after clean amputation, [Orr] 710—ab
welchii infection complicating laparotomy, [Nasan] 1736—ab
BACK, diagnostic signs in low back conditions, 1875
BACTEREMIA: See also Bacillemia; Septicemia
cause of terminal blood picture changes, [Grace] 785—ab
in endocarditis lenta, [Wydrin] 1495—ab
Shigella alkalescens, [Starkey] 632—ab
BACTERIA: See also Bacillus; Bacterium
agglutination, [Heidelberger] 1986—ab
capsules, demonstration, [Howie] 716—ab
Chemistry: See Chemistry
clostridium, Vibrion septique from infection of alimentary tract, [Borthwick] 376—ab
culture of aerobic, use of absorbent pulpit, [Williams] 788—ab
culturing, requiring carbon dioxide tension, [Dickens] 528—ab
flies, filth and, 921—E
histiocytic elements in blood after inoculations, [Perla] 451—ab
in peritoneal cavity, action of blood on, [Teneff] 719—ab
pyogenic, cod liver oil effect on, [Löhr] 955—ab
sensitization, 2038
tannic acid may convey, [Martin] 711—ab
Toxins: See Toxins
Vaccines: See Vaccines
variants, mutual antagonism, 494—E
BACTERIOLOGY: See also Appendix; Leprosy; Lungs, abscess; Mouth; etc.
Microbiologic Research Institute, Japan, 1553
BACTERIOPHAGE, immunization, [Eaton & Bayne-Jones] *1936
in bacillary dysentery, [Feemster] 1487—ab
in pelvic sepsis, 514
research on, Philadelphia, 1956
therapy, [Eaton & Bayne-Jones] *1769; 1780—E; *1847; *1934
therapy in colitis and in intestinal fistulas, [MacNeal] 2056—ab
therapy in colon bacillus septicemia, [MacNeal] 2056—ab
BACTERIUM: See also Bacteria
Brucella abortus "carrier" cows, [Thompson] 871—ab
Brucella abortus dermatitis from treating infected cows, 774
Brucella abortus Infection: See Abortion, contagious; Undulant Fever
Brucella, antigenic relation to pasteurella, pfeifferella and proteus organisms, [Wilson] 1992—ab
Brucella, differentiation, [Jadassohn] 380—ab
BAKEBEST Bakers Flour, 261
BAKELITE dust, hazards, 280
BAKER, FRED, impostor, 196
BAKER'S Dairy Vitamin D Milk, 2029
BAKERS eczema, cause, [Zitzke] 787—ab
Special Hard Wheat Flour, 261
warming to, Louisiana, 1459
BAKING powder, Snow King, 1151
BALZAC'S Dr. Veron, father of advertising, 1463
BANANAS, bite by snake in, [Fernan-Nunez] 809
Diet: See Diarrhea, treatment; Obesity, treatment
BANCROFTOSIS: See Filariasis
BANDAGES: See Abdomen; Dressings; Foot imbalance
BARBERS, Wassermann tests for, 1160
BARBITAL: See also Acid, barbituric; Allonal; Anesthesia
addiction, 1090
arthralgias and myalgias, [Castin] 1813—ab
poisoning (acute), lesions of, [Carrière] 791—ab
poisoning, therapy, [Fantus] *749
sale, control, England, 1788
Treatment: See Epilepsy
BARIUM aspiration, fatal, [Sullivan] *337
BAROMETRIC PRESSURE in metabolism, experiments, 514
BARTHOLIN GLAND, cancer (primary), [Lyle] 1982—ab
endometrioma, [Duncan] 526—ab
BASOPHIL Adenoma: See Pituitary Body
BATHS: See Arthritis, chronic; Swimming Pools
Paraffin: See Arthritis, treatment
Sun: See Sunlight
BAUMANN DAIRY CO. Vitamin D Milk, 1623
BAYER Aspirin, 119; 1161
Meister-Lucius firm peddles advertising leaflets, 1635
BAZZANO Method: See Peptic Ulcer, treatment
B C G: See Tuberculosis, immunization
BEACH, LETHA, sentenced, 686
BEANS: See Castor Bean
BEATRICE Creamery Co. Vitamin D Milk, 1709
BEAUTICIANS, Wassermann tests for, 1160
BECKER'S Test: See Hearing
BEE, stings, treatment, 937; (reply) [Glaser] 1328
stings, toxic effects, 278
Venom: See Rheumatism, treatment
BEECHMONT Dairy's Vitamin D Milk, 341
BEECH-NUT Pressure Cooked Oatmeal Cereal, 29
BEER, mislabeled, to be seized by U. S., 616
nature and food value, 1951—E
BELCHING, with aerophagia, 778
BELGIAN Medical Federation, 26th Congress of, 2042
Red Cross: See Red Cross
BELL, CHARLES, enduring achievements, [Woltman] *157; (sign) *160
BELL, JOHN W., Lectureship established, 496
BELLEVUE Dairy Vitamin D Milk, 1623
BELMONT Brand Evaporated Milk, 111
BELT, Abdominal: See under Abdomen; Emphysema
BENSON'S New Life, 429—BI
BENZENE dichloride, injurious to breathe air containing paradichlorbenzene? 1174
poisoning, industrial, 355
poisoning (possible) in painter, 1558
poisoning (possible) with granulocytopenia, 1560
BENZIDINE Test: See Feces, blood in
BENZOATE: See *ortho*lodoxybenzoate
Sodium: See Peptic Ulcer, treatment
BENZYL Alcohol, Sodium Mercrhuate 5% Solution with (Ulmer), 1708
BENZYLEPHEDRINE, analgesic in chaulmoogra injections, [Feng] 634—ab
BEQUESTS: See Hospitals
BERIBERI, death from, New York, 762
gastro-intestinal tract rôle in, [Strauss] *1; [Goudsmit] 724—ab
BERKSHIRE Brand Evaporated Milk, 1709
BERNARD, LEON, death, 1320; 1390
BESREDKA Antivirus: See Antivirus
BEVERAGES: See also Ginger Ale
Alcoholic: See Alcohol; Beer; Whisky; etc.
Krim-ko Chocolate Flavored Drink, 918; 1069; 1779; 2029
BIBLIOGRAPHY of Military Medicine, International Bureau of, 1005
BILE Acid Tolerance Test: See Liver function test
bacteria in, 2043
chemistry in biliary tract disease, [Ravdin & others] *1504
peritonitis without visible gallbladder perforation, [Melchior] 953—ab
pigment and hemoglobin regeneration, [Patek] 1021—ab
salts-phenolphthalein combination, Neo-Probilin, 1473
BILE DUCTS, anastomosis (intrahepatic) with stomach or intestine, [Gohrbandt] 1575—ab
drainage for gallstones, [Zinninger] 1990—ab
drainage, nonsurgical, 847
intrahepatic, cholangiography with thorium dioxide sol, [Saralegui] 1022—ab
obstruction by adenopathies, [Brulé] 877—ab
obstruction, hepatic changes with, [Stewart] 711—ab
obstruction, use of iodized oil, [Thorlakson] 1408—ab
stenosis and occlusion, blood sugar in, 694
BILIARY TRACT: See also Bile Ducts; Gallbladder; Liver
disease, [Ravdin & others] *1504
disorders, atony of small intestine in, [Bayer] 1414—ab
physiology (applied) of extrahepatic, [Ivy & Bergh] *1590
BILIRUBIN, fate in small intestine, [Sackey] 870—ab
in Blood: See Blood
tolerance test of liver function, [Brøchner-Mortensen] 1188—ab
BILIVACCIN, 626
BILTMORE Dairy Farms Vitamin D Milk, 1709
BINDER: See Emphysema
BING Brand Pineapple, 1151
BIOCHEMISTS, fifth All-Union Congress of, 1552
BIOLOGIC Photographic Association, [Creer] 1325—C
Group: See Physicians
Products: See also Serum; Vaccine; etc.
products, rules on use of, Italy, 273
research, grant by Rockefeller Foundation, 1458
BIOPSY: See also Conjunctiva
aspiration, [Ball] 448—ab
high frequency currents in performing, [Guequierre & Weidman] *1693
BIRELEY'S California Orange Juice with Lemon Juice, 919
BIRTH: See Labor
Rate: See Vital Statistics
BIRTH CONTROL, advice on, at public clinics, England, 120
conference on, Catholic Physicians' Guild of Chicago, 1784
BIRTH CONTROL—Continued
contraception and, 756—E; [Emerson] 1169—C
contraceptives, legislation, Irish Free State, 843
contraceptives, New Zealand controls, 1869
Gräfenburg ring for contraception, 1727
in Prague, 123
National Committee on Contraceptive Legislation, 1547
quinine contraceptive, eruption from, [Ford] *483
"Safe Period": See Menstruation
BISCUIT flour, Ever Ready, 1379
mix, Fisher's, 681
Wheat: See Cereals
BISMUTH oxychloride modification of radiopaque mass, [Poth] 1023—ab
poisoning, oral, [Serefis] 954—ab
preparations, inclusions in renal epithelial cells after, [Pappenheimer] 1885—ab
Salicylate: See Verruca
Sodium Tartrate: See Verruca
Subnitrate: See Blood Pressure, high
Subsalicylate with Butyn-D. R. L., 1067
Treatment: See also Lupus erythematosus; Syphilis
treatment, pigmentation after, 432
BITES: See Mosquito; Snake
BIZ, 205—BI
BLADDER: See also Urinary Tract
closure (immediate) in suprapubic prostatectomy, [Haynes] *174
complications, from irradiation of pelvis, [Jones] *1678
diaphanoscopic examination for ascites and ovarian cysts, [Klaften] 1992—ab
diaphanoscopy (transvesical) [Klaften] 456—ab
drainage, establishing suprapubic [Evans] 446—ab
explosions within, in transurethral electroresection, [Kretschmer] *1144
Fistula: See Fistula
inflammation (relapsing), etiology, [Wildbolz] 719—ab
neck contractures, transurethral surgery, [Caulk] 216—ab
regurgitation, pyelovenous reflux and intrarenal absorption, [Cloeca] 719—ab
roentgen study, air injection in (aerocystography), [Ross] 875—ab
schistosomiasis, frequency in Fezzan, 503
ulcer, simple, [Pollak] 1496—ab
BLAKE'S Herb Tablets, 697—BI
BLASTOMA: See Fibroblastoma; Glioblastoma
BLASTOMYCOSIS fungi of coccidioidal granuloma, [Benham] 1363—ab
in Brazil, 1868
of lungs and pleura, [Spreng] 1659—ab
treatment, [Fantus] *833
BLEEDING: See Hemorrhage; Venesection
BLIND technicians, clinic staffed by, 688
BLINDNESS: See also Vision, defective
after neoarsphenamine, [Juler] 2057—ab
A. M. A. Committee on Definition of, report, [Jackson & others] 1445
Color: See Color Blindness
hereditary, problem of sterilization, Germany, 766
BLISTER: See Histamine
BLOOD: See also Hemorrhage; Hemotherapy
action on bacteria in peritoneal cavity, [Teneff] 719—ab
alkali reserve in lepers, [Herrera] 77—ab
alkali reserve (plasma) in surgical diseases, [Szold] 1496—ab
Allen-Doisy test factor in, [Engel] 722—ab
alterations in acute rheumatism, [Pezharskaya] 382—ab
ammonia, hyperammonemia in eclampsia, [Llusia] 1032—ab
ammonia in estimating liver diseases, [Monguió] 1267—ab
amylase estimation in pancreas disease, [Zelikson] 955—ab
Bacteria in: See Bacteremia; Septicemia
bilirubin, determining, [Kazakov] 382—ab
bilirubin, determining by diazo method, [Van den Bergh] 529—ab
bilirubin, disintegration of erythrocytes in malariotherapy, [Végh] 1897—ab
bilirubin, outfit to determine icterus index, 208
bilirubin (plasma) estimation, [Bensley] 714—ab
bilirubinemia in syphilology, [De Gregorio] 1894—ab
calcium in, vs. spinal fluid, [Katzenelbogen] 1102—ab
calcium-potassium ratio in women, [Schepetinsky] 304—ab
calcium (serum) in epilepsy, [Griffiths] 1490—ab
calcium (serum) in pregnancy, [Mull] 68—ab
calcium (serum) vs. sedimentation speed in tuberculous, [Kurakane] 1413—ab
carbon monoxide in, after exposure, [Martland] *647
catalase, vitamins effect on, [Jusatz] 147—ab
catalytic property in children, [Török] 1186—ab
Cells: See also Erythrocytes; Leukocytes

BLOOD—Continued
cells in experimental syphilis, [Rosahn] 374—ab
cells, rotor produces uniform dispersion in pipet, [Bryan & Garrey] *1059
changes after gastric resection, [Dedichen] 796—ab
changes from aniline poisoning, [Gaeta] 721—ab
chemistry outfits, La Motte, 208
chlorides in hyperemesis of pregnancy, [Kretzschmar] 1744—ab
cholesterol, dinitrophenol effect on, [Grant] 1888—ab
cholesterol from dinitrophenol and thyroid, [Cutting] 525—ab
cholesterol in pulmonary tuberculosis, [von Babarczy] 635—ab
cholesterol (plasma), response to insulin and epinephrine injection, [Bruger] 71—ab
cholesterol, relation to essential hypertension, [Bürger] 1660—ab
cholesterolemia and thyroid disorder, 113—E; [Epstein] 507—C
cholesterolemia in surgical diseases of infancy, [Bernabeo] 1029—ab
Circulation: See also Arteries, coronary
circulation (cerebral) in epileptic seizures, thermo-electric recorder, [Gibbs] 947—ab
circulation, current potential in, [Leiri] 149—ab
circulation, determining velocity in vein of arm, [Homma] 1414—ab
circulation, effects of dinitrophenol, [Stockton & Cutter] *912; [Freeman] 1102—ab
circulation (enterohepatic), gallbladder regulates, [Heckmann] 223—ab
circulation, failure as cause of asphyxia, [Henderson] *837
circulation, neurocirculatory instability, [Herrick] 1335—ab
circulation (peripheral) in arthritis, [Kovacs] 1803—ab
circulation, society for research on, 355
circulation through kidney, 129; 1876
Citrated: See Blood Transfusion
Clotting: See Blood coagulation
Coagulation: See also Hemophilia
coagulation and scurvy, 264—E
coagulation time, calcium gluconate effect on, 626
Complement of: See Complement
Disease: See also Anemia; Anemia, Pernicious; Angina, agranulocytic; Bacteremia; Leukemia; Septicemia
disease, management, [Musser] 286—ab
disease, treatment, advances, [Witts] 1812—ab
disease, typhoid-like symptoms, [Klima] 1816—ab
distribution changes caused by changes in position, [Ude] 534—ab
eosinophilia, determined by rapid method, [Friedman] *1618
fibrinogen in new-born, [Naeslund] 724—ab
Flow: See Blood circulation
formation, extramedullary hematopoiesis, 1312—E
formation, hematopoietic hormone of liver, 1081
forming tissues, phylogeny, 808—ab
group ferment and substance in saliva, [Satoh] 303—ab
groups, heredity, forensic application, [Landsteiner] *1041
groups, isohemoagglutination subgroups A and A_2 value in transfusion, [Blinov] 953—ab
groups, paternity determined by agglutination tests, 704
groups, transfusion admissible in panagglutination, [Lewin] 306—ab
guanidine, hyperguanidinemia cause of tetany, [Dodd] 67—ab
histiocytic elements after inoculations, [Frola] 451—ab
P_H, of umbilical blood, [Mikawa] 221—ab
P_H, of venous blood, [Harris] 220—ab
in Cerebrospinal Fluid: See Cerebrospinal Fluid
in Feces: See Feces
in Semen: See Semen
insulin in, demonstration, [Boller & others] 1187—ab
iodine and ultraviolet rays, [Bennholdt-Thomsen] 303—ab
iodine, diagnostic value, [Elmer] 80—ab
iodine, iodine tolerance test for, [Perkin] 1568—ab
iodine relation to essential hypertension, [Bürger] 1660—ab
ketonemic curve as liver function test, [de Flora] 379—ab
lactic acid, effects of tobacco smoking, 1382—E
lactic acid in malaria, [Demurtas] 145—ab
lipase estimation in pancreas disease, [Zelikson] 955—ab
lipid composition of leukocytes in pregnancy, etc., [Boyd] 1989—ab
Occult: See Feces, blood in
oxalemia and glycogen metabolism regulation, [Battistini] 1814—ab
oxygen, anoxemia effect on electrocardiograms, [Katz] 1097—ab
BLOOD—Continued
oxygen in exophthalmic goiter, [Rynearson] 1026—ab
oxygen saturation of arterial, improved by venesection, [Hitzenberger] 1414—ab
phenolemia (normal), [Castex] 1196—ab
phosphatase in obstructive jaundice, [Armstrong] 632—ab
phosphatase (plasma), [Austoni] 2058—ab
phosphatase (serum), method for determining, [King] 1568—ab
phosphorus, clinical determination, [Burkens] 1998—ab
phosphorus (serum) in pregnancy, [Mull] 68—ab
phytotoxic index in schizophrenics, [Freeman] 1485—ab
picture changes in pemphigus, [Grace] 785—ab
picture in endocarditis lenta, [Wydrin] 1495—ab
picture in pulmonary tuberculosis, [Cold] 1818—ab
pigment, porphyrin elimination in pregnancy, [Carrié] 1815—ab
Plasma: See Blood alkali reserve; Blood proteins
platelet content, calcium effect on, [Savagnone] 222—ab
platelet count in postoperative thrombosis, [Fradelubl] 288—ab
potassium in women, [Schepetinsky] 304—ab
proteins (plasma), relation to bone marrow, [Johansen] 149—ab
proteins (serum), estimation, value in tuberculosis, [Pagel] 717—ab
protein (serum), relation to lymph, 1952—E
quantity, and cardiac insufficiency, [Landau] 1338—ab
radon intravenously effect on, [Nemenow] 1495—ab
Sedimentation: See also Tuberculosis
sedimentation rate in hay fever, [Gelfand] 1486—ab
sedimentation rate in pregnancy, [Griffin] 1651—ab
sedimentation rate in rheumatic carditis, [Perry] 1990—ab
sedimentation reaction in new-born, [Ellenberg] 444—ab
sedimentation speed, micromethod in determining, [Deinum] 226—ab
sedimentation speed vs. serum calcium in tuberculous, [Kurakane] 1413—ab
sedimentation tests, repeated, [Van Antwerp] 1806—ab
sedimentation tests; Westergren method, 1171
sensitivity to, be induced, 279
Serum: See Blood calcium; Blood proteins; etc.
silver, high, spectrographic demonstration [Blumberg & Carey] *1521
staining method for diagnosis of leukemia, 693
streptococcus in, in pemphigus, [Welsh] 1982—ab
Sugar: See also Diabetes Mellitus
sugar, after phlorhizin subcutaneously, 273
sugar and cerebral injury, 1327
sugar curve in mental diseases, 273
sugar, glycemia from introducing stomach tube, [Cozzutti] 953—ab
sugar, hyperglycemia after local anesthesia, [Calzolari] 77—ab
sugar, hyperglycemia due to anterior pituitary-like principle, [Davis] 217—ab
sugar, hyperglycemia (morphine) and grape sugar [Maeda] 75—ab
sugar, hypoglycemia (chronic) in childhood, [Kramer] 1487—ab
sugar, hypoglycemia relation to antral disease and bronchiectasis, [Sippe] 377—ab
sugar, hypoglycemic states, 933
sugar, hypoglycemic states, neurologic symptoms, [Rynearson & Moersch] *1196
sugar in chronic alcoholism and in epilepsy, [Maarssø] 226—ab
sugar in stenosis and occlusion of choledochus, 694
sugar, increase after thoracoplasty, [Scharff] 225—ab
sugar level changes with surgical operations, [Weddell] 875—ab
sugar level, effect of exercise on, [Soskin & others] *1768
sugar reducing effect of methylene blue, [Gabrielli] 222—ab
sugar, tobacco smoking effect on, 1382—E
Tubercle Bacillus in: See Tubercle Bacillus
urea-urine urea relation, [Cottet] 301—ab
venous (mixed), obtaining by arterial puncture, [Friedman] 525—ab
vitamin D in, in cows fed irradiated yeast, 493—E
Vomiting of: See Hematemesis
BLOOD PRESSURE, caffeine and coffee effect on, [Horst] 1986—ab; 1987—ab
capillary, and capillary permeability, 920—E
determination (direct) by arterial puncture, [Wolf] 723—ab
high, and arteriosclerosis, 1794
BLOOD PRESSURE—Continued
high, area of histamine flares in, [Ernstene] 292—ab
high arterial, garlic therapy in, 777
high arteriolar, heredity in, [Ayman] 216—ab
high, bismuth subnitrate in, 1710—E
high, current potential in circulation and, [Leiri] 149—ab
high diastolic, 1644
high, diathermy applied locally in, [Trolow] 1661—ab
high essential, in pregnancy, [Seitz] 1997—ab
high essential, in young girl, 278
high essential, iodine and cholesterol in blood, [Bürger] 1660—ab
high, hypertensive heart disease, [Stone] *152
high, in new-born, 126
high, indicating therapeutic abortion, [Herrick] *1902
high, magnesium sulphate in, [Lissner] 71—ab
high malignant, histologic renal changes, [Cain] 292—ab
high, myocardial changes in, [Levine] 1485—ab
high, paraganglliomas and epinephrine hypertension, [Bauer] 1492—ab
high, pregnancy and, 1011
high, progressive fatigue and, 1254
high, protein in diet in, 937
high, thyrotoxic, [Parkinson] 2057—ab
high, treatment, 1398
high, treatment with renal extracts, [Gomez] 1412—ab
high, Trypsogen-Carnrick, 1782—E
intrapulmonary atmospheric pressure and, [Adrio Mateo] 1575—ab
low arterial in spinal anesthesia, [Angelesco] 876—ab
lowering action of epinephrine intravenously, [Heritzka] 76—ab
of cutaneous vessels in preeclampsia, [Raisz] 1188—ab
ovary hormone effect on, [Liebhart] 1188—ab
plateau form of oscillometric curves, [Vaquez] 301—ab
pulse (throttling) effect on, [Wolf] 723—ab
reaction and posture, [Rudsit] 795—ab
response to drainage of ascites, [Brams] 444—ab
temporal reflex and, [Vermel] 79—ab
venous, in heart failure, [Friedfeld] 72—ab
venous, in mitral stenosis, [Espejo Solá] 720—ab
BLOOD TRANSFUSION, admissibility in panagglutination, [Lewin] 306—ab
center for citrated blood for, Bordeaux, 1960
donors, organization, Vienna, 1465
immunotransfusion in stomatology, 694
in septicemia in children, [Roehm] 445—ab
indications, [Hartmann] *1353
insulin in blood demonstrated by, [Boller] 1187—ab
intraperitoneal, 1171
Isohemo-agglutination subgroups A_1 and A_2 and, [Blinov] 953—ab
reactions due to diet of donor, [Price] 1571—ab
syphilis transmitted by, 61
BLOOD VESSELS: See also Arteries; Capillaries; Vasomotor Mechanism; Veins
disease and heredity, 1245
disease, cholesterol metabolism in, [Kirchgessner] 721—ab
disease, histamine iontophoresis in, [Doane] 1983—ab
disease, treatment by alternating negative and positive pressure (Landis-Herrmann's Pavaex) [Landis] 1483—ab; [de Takáts] *1920
Mesenteric Occlusion: See Embolism
peripheral system, effects of cigaret smoking on, [Wright & Moffat] *318
repair, experimental studies, [Dixon] *1129
skin, pressure in preeclampsia, [Raisz] 1188—ab
BLOODLETTING: See Venesection
BLOSSOM Brand Pineapple, 1151
BLOWER: See Electric air blower
BLUE Ribbon Creamery Vitamin D Milk, 2029
BOARD Examinations: See State Board Reports; under specific boards as American Board; National Board; etc.
Examining: See also Pathology
examining, essentials for, in specialties, for approval by A. M. A. Council, 48: *579
BOBBIN in esophagus, [Equen] *1845
BODY Acidity: See Acidity
Build: See Constitution
Dead: See Cadavers; Medicolegal Abstracts at end of letter M
function, morphine effect on, [David] *474
Organs: See Organs
Temperature: See Temperature, Body
vitamin storage in, 114—E
Weight: See also Infants, New-Born
weight, biologic effects of thymus extract (Hanson), [Rowntree & others] *1425
weight, loss in children, liquid petrolatum in, [Till] 377—ab
weight, underweight, dietary treatment, [Brown] 1023—ab

BONE MARROW, amyloidosis, [Gerber] 70—ab
plasma proteins relation to, [Johansen] 149—ab
tumor, primary malignant, 1049—ab
BONES: See also Fractures; Joints; Orthopedics; Osteitis; Periosteum; under names of specific bones
atrophy (local) vs. vitamin D and calcium, [Fischer] 869—ab
changes in Hodgkin's granuloma, [Craver] 294
formation (heterotopic), venous stasis effect on, [Roome] 786—ab
formation in osteogenic sarcoma metastases, [Harding] 1097—ab
fragility, osteopoikilosis, [Nichols] 946—ab
graft, after injury to ulna, 513
graft (massive) for congenital pseudarthrosis of leg, [Colonna] *2012
graft, study, [Camitz] 306—ab
growing, action of acetylsalicylic acid, [Mutch] 139—ab
of new-born, [Toverud] 536—ab
Paget's disease: See Osteitis deformans
regeneration and diathermy, [Weinberg] 294—ab
Softening: See Osteomalacia
syphilis, pseudotumoral form, [Satanowsky] 1814—ab
tissue after roentgen irradiation, [Dahl] 536—ab
tuberculosis, congo red reticulo-endothelial function test, [Rabboni] 532—ab
tumor, diagnosis, prognosis, [Glauner] 1575—ab
tumor, liposarcoma, primary, [Barnard] 1736—ab
BOOKS: See also Library; Book Notices at end of letter B
given to Indianapolis Methodist Episcopal Hospital, 417
BORAX industry, hazards, 1971
BORCHERDT'S Malt Soup Extract, 1623; 2029
BORDEN'S Vitamin D Milk, 1151
BORGESON Bros. Dairy Vitamin D Milk, 1623
BOSWELL Dairies Vitamin D Milk, 919
BOTULISM, infection with B. botulinus, [Hürthle] 1413—ab
treatment, serum, [Velikanov] 382—ab
BOUGIES, Heat: See Eustachian Tube obstruction
BOWEY'S Dari-Rich Syrup, 1709
BOWMAN Cancer Institute: See Cancer
Dairy Vitamin D Milk, 1151
BRACHIAL PLEXUS birth injury, 857
BRAIN: See also Cerebellum; Corpus Callosum; Cranium; Head; Hydrocephalus; Lateral Sinus; etc.
abscess, [MacKenzie] 450—ab
arsenic in, relation to pericapillary hemorrhages, [Osterberg] 709—ab
Atrophy: See Cerebellum
blood flow, thermo-electric recorder in epileptic seizures, [Gibbs] 947—ab
blood perfusion of, diathermy effect on, [Frey] 1815—ab
cancer of maxillary sinus extending into, [Finkelman] 1263—ab
complications of putrid pleuropulmonary suppuration, [Cohen] 786—ab
cortex, calcification, [Krabbe] 1653—ab
cortex lesion causing spastic paraplegia, [Winkelman & Eckel] *662
disease, lead encephalopathy, [Schwarz] 720—ab
echinococcosis, [Dew] 1409—ab
Embolism: See Embolism
encephalogram, misinterpretation, [Saamer] 147—ab
encephalography in cerebral disorders in childhood, [Rupillius] 1338—ab; 1412—ab
encephalography in manic-depressive psychosis, [Moore] 293—ab
Hemorrhage: See Encephalitis, hemorrhagic
injury and sugar metabolism, 1327
injury, in new-born, calcium therapy, [Shannon] 1482—ab
interbrain and diabetes insipidus, [Gaupp] 793—ab
lesion and convulsions, 435
malacia due to foam thrombosis, [Löffler] 1896—ab
short wave therapy of, in dementia praecox, [Horn] 1031—ab
stem, acute poliomyelitis [von Klss] 148—ab
subcortex, stimulation, [Gantt] 430—C
tumor, bilateral glioblastoma multiforme, [Taylor] 1485—ab
tumor, decompression treatment, 694
tumor, diagnosis, [Garland] 1410—ab
tumor, registry at Yale, 1630
ventricles (lateral), gross anatomy, [Torkildsen] 875—ab
ventriculography and encephalography, [Urban] 1661—ab
BRAN, effects on gastrointestinal tract, 701
BRANCHIAL APPARATUS: See also Fistula, branchial
cancer, [Cleland] 1491—ab
BRANDER'S No. 7, 205—BI
BRANDES Creamery Vitamin D milk, 1623
BRAZILIAN Congress of Neurology, Psychiatry and Legal Medicine, 1553
BREAD: See also Biscuit; Flour; Wheat
Burnett's Sliced, 111
Hardy's Twin Loaf, 1379
Laub's Quality, 1379
Long Royal, 1379
Mother's Jumbo, 1379
Proteo, 992
quality, complaints on, France, 1320
Royal Table Queen, 1379
Stroehmann's, 1379
Waldensian Tar Heel, 1379
BREAST: See also Lactation; Nipple
atrophy, estrogenic substances in, 1796
cancer, postoperative irradiation, 130
cancer, radium jacket for recurrent skin lesions in, [Richards] 1570—ab
cancer, radium treatment, 1864
cancer, removal of breast or radical excision, [Goldschmidt] 148—ab
congestion sign of follicular activity, [Sauphar] 222—ab
corpus luteum extract effect on, [Dahl-Iversen] 1032—ab
Feeding: See Infants, feeding
Hemorrhage: See Nipple
hypertrophy, massive diffuse, in girls, [Wakeley] 143—ab
inflammation, mastitis gargantuan and hypertrophy in puberty, [Goodman] *335
mammary glands in puberty, [Peiler] 1416—ab
mastitis adolescentium, [Harbeson] 373—ab
mastodynia, 859
senile involution of gland and cystic fibrosis, [Gatta] 635—ab
stimulation of gland development, [Weichert] 136—ab
Surgery: See also Breast cancer
surgery, method to avoid skin grafting in amputation, [Baldwin] 1981—ab
Tea, 697—BI
tuberculosis, diagnostic errors, [Resnitzky] 532—ab
tumors, cyclomastopathy, [Oliver] 135—ab
tumor, fibro-adenoma estrin yielded by, [Lewis & Geschickter] *1212
BREATHING: See Respiration
BREMER Treatment: See Cancer
BREWERS' Yeast: See Anemia, Pernicious, treatment; Yeast
BRIGADELL'S CAMPHOROLE, 429—BI
BRIGHT'S Disease: See Nephritis
BRILLIANT BLUE FCF, for diagnostic gastrointestinal studies, [Taylor] 522—ab
BRINKLEY, JOHN R., fails again, 686
BRITISH Association for Advancement of Science, 1163
Empire Cancer Campaign, 765
Graduate Medical School, 421
Medical Association, 197; 421; 498; 617; 930; 1162; 1239
BROADVIEW Dairy Vitamin D Milk, 1069
BROMIDE, deteriorating effects absent in epilepsy, [Paskind] *100
Sodium: See Epilepsy treatment
BRONCHIECTASIS, 128; 2050
congenital, operative treatment, [Sauerbruch] 1095—ab
from sulphur dioxide exposure, 362
hypoglycemia and ketosis relation to, [Sippe] 377—ab
in children, [Anspach] 67—ab
pneumonectomy in, [Windsberg] 1571—ab
BRONCHOPNEUMONIA complicating measles, 701
BRONCHUS, calcium deposits in, 1254
cancer, 691
cancer and pulmonary aspergillosis, [Kampmeier] 1180—ab
cancer, surgery for, [Rienhoff & Broyles] *1121
occlusion, [Cutler] 1410—ab
occlusion for pulmonary tuberculosis, [Adams] 1024—ab
BROOKMONT Brand Evaporated Milk, 111
BROOM, ROBERT, honored, 1962
BROWN Dairy Vitamin D Milk, 1623
BRUCELLA: See Bacterium
BRUCELLOSIS: See Undulant Fever
BRUISES: See Contusions
BRUSH: See also Shaving Brushes; Tooth Brushes
factory employee, anthrax in, 351
BUBO, therapy, [Fantus] *1853
BUERGER'S Disease: See Thrombo-Angiitis obliterans
BUFANO Test: See Liver function test
BUILDINGS: See Office buildings
BURDICK Dual Zoalite, 339
Electrosurgical Unit, 1619
RV-85 Zoalite Lamp, Prescription Model, 1855
Z-12, Z-30, Z-75, Zoalite Lamp, 1855
BURION'S Relief, 204—BI
BURNETT'S Green Coloring: See Color
Sliced Bread, 111
BURNS, burning of tongue and canker sores, 1971
lymph canals in repair of lesions from, [McMaster] 1569—ab
of anterior segment of eye by steam and by acid, 1633
treatment, cod liver oil salve, [Löhr] 954—ab
BURNS—Continued
treatment, complications, [Penberthy] 1807—ab
treatment, Cook County Hospital, [Fantus] *1446
treatment, electric air blower for drying wounds, [Burton] *338
treatment, horse serum or cow serum, 435
treatment, tannic acid, [Hagemann] 1556—C; 1726; (early references) [Weaver] 1968—C
BURSA, synovial, development, [Black] 2055—ab
BURSITIS, olecranon, treatment, 861
BUTTER, Challenge, 1779
cholesterol content, [Ansbacher] 137—ab
Substitutes: See Oleomargarine
BUTTERMILK, Southern Dairies Creamed, with vitamin D, 1539
BUTTOCKS: See also Gluteal Region
tumor, teratoma containing rudimentary arm bones and hand, [Brines] *338
d-**BUTYL PHTHALATE**, toxicity of, 860
BUTYN, Ophthalmic Ointment, 917

BOOK NOTICES

Abbatucci, S., Les ordonnances du médecin praticien, 1259
Abramson, H. A., Electrokinetic Phenomena, 942
Adair, F. L., editor, Obstetric Medicine, 364
Adolescence, Road to Adolescence, 133
Alcohol, use of, Ancestry of the Long-Lived, 1477
Alcoholism, Studies on Possible Intoxicating Action of 3.2 Per Cent Beer, 364
Alexander, G. F., Ocular Dioptrics and Lenses, 1176
Allergy in General Practice, 283
American Country Life Conference, National Policies Affecting Rural Life, 284
American Pocket Medical Dictionary, 1095
American Women's Hospitals, Certain Samaritans, 65
Anatomy, Applied Anatomy (Davis), 1881
Anatomy, Atlas of Selected Cases of Pathological Anatomy, 941
Anatomy, Cours élémentaire de dessin d'anatomie du squelette, 943
Anatomy, Human Sex Anatomy, 1095
Anatomy, John Keat's Note Book, 1977
Anatomy of Animal Types (Australia) 1259
Anatomy, Pocket Anatomy, 519
Anatomy, Surgical Anatomy and Physiology, 1176
Ancestry of Long-Lived, 1477
Andrews, H. R., Midwifery for Nurses, 941
Anemia, Anaemias, 1330
Anesthesia, Allgemeinnarkose und örtliche Betäubung, 865
Anesthesia, Lumbalanästhesia in der Geburtshilfe und Gynäkologie, 1258
Anesthesia, Narkose zu operativen Zwecken, 439
Anesthesia, Spinal Anesthesia, 439
Anigstein, L., Researches on Tropical Typhus, 780
Antimeningococcus serum, L'immunité par mécanisme physico-chimique, 1019
Appleton, J. L. T., Jr., Bacterial Infection, 437
Aristotelian logic, Science and Sanity, 211
Arthritis, Medical and Orthopaedic Management of Chronic Arthritis, 705
Arzt, L., editor, Die Haut- und Geschlechtskrankheiten, 439; 1478; 1564
Aschoff, Rheumaprobleme, 943
Ashford, Bailey K., A Soldier in Science, Autobiography, 1977
Assmann, H., Die klinische Röntgendiagnostik der inneren Erkrankungen, 1565
Assmann, H., editor, Ergebnisse der gesamten Tuberkuloseforschung, 1330
Association for the Study of Negro Life and History, Inc., 439
Austin, R. G., Aids to Qualitative Inorganic Analysis, 519
Australia, Anatomy of Animal Types, 1259
Babinski, J., Œuvre scientifique, 1403
Bacteria, Die Typenlehre in der Mikrobiologie, 707
Bacteriologia, 210
Bacteriology, Bergey's Manual, 437
Bacteriology, Introduction to Practical Bacteriology (Mackie), 707
Bacteriology, Oxidation-Reduction Potentials, 65
Bacteriology, Textbook of Bacteriology (Zinsser), 1331
Bacteriology, Your Germs and Mine, 132
Barbiturates, Le barbiturisme algu et les antidotismes gardenal, 1331
Barbiturates, L'intoxication par les somnifères (intoxication barbiturique), 1478
Barcroft, J., Features in Architecture of Physiological Function, 517
Bassett, C., Mental Hygiene in the Community, 628
Bassini, L'opération de Bassini pour la guérison radicale de la hernie inguinale, 1331
Beaumont, G. E., Recent Advances in Medicine, 518
Beer, Studies on the Possible Intoxication of 3.2 Per Cent Beer, 364
Bell, E. T., editor, Text-book of Pathology, 1879
Bell, W. B., Principles of Gynaecology, 428

Book Notices—Continued
Bérard, L., Formes chirurgicales de la tuberculose intestinale, 943
Bergey, D. H., Manual of Determinative Bacteriology, 437
von Bergmann, G., editor, Handbuch der inneren Medizin, 1479
von Bergmann, G., Lehrbuch der inneren Medizin, 133
Bertram, F., Die Zuckerkrankheit, 1402
Bett, W. R., editor, Short History of Some Common Diseases, 1018
Biochemistry, Annual Review, 1094
Biochemistry, Fundamentals in Relation to Human Physiology, 519
Biochemistry, Oxidation-Reduction Potentials, 65
Biological Chemistry, Laboratory Manual, 1401
Biology, Electrokinetic Phenomena, 942
Birth Control, Technique of Contraception, 2053
Blacker, C. P., editor, Chances of Morbid Inheritance, 365
Blindness, Milton's Blindness, 1019
Bloch, I., Odoratus Sexualis, 1259
Blood, Hypochlorémie et accidents post-opératoires, 629
Blood Pressure, Les traitements de l'hypertension artérielle, 779
Blood Vessels, Thérapeutique médicale, 1329
Bloom, W., Maximow's Textbook of Histology, 1976
Blumgarten, A. S., Textbook of Materia Medica and Therapeutics, 1974
Bones, Radiology, 1565
Bose, J. P., Handbook on Diabetes Mellitus and Its Modern Treatment, 1974
Boyd, W., Text-Book of Pathology, 1564
Brailsford, J. F., Radiology of Bones and Joints, 1565
Brain, Die kombinierte Enzephal-Arteriographie, 865
Brain, Zur Kenntnis der Hirnveränderungen bei der Normalen Altersinvolution, 131
Breast, Contribution à l'étude radiographique, 864
Breed, L. M., Human Machine: Its Uses and Abuses, 2053
Briggs, E. A., Anatomy of Animal Types, 1259
Brocq-Rousseau, D., Le sérum normal: Récolte et caractères physiques, 1017
Bronchi, Medicación local pulmonar por via intratraqueal, 1018
Bronchiectasis, Les dilatations des bronches, 211
Bronchoscopy, Esophagoscopy and Gastroscopy, 1799
Brown, E. G., Milton's Blindness, 1019
Brown, W., Psychology and Psychotherapy, 781
Brucella Infections in Animals and Man, 210
Buck, R. W., Essentials of Physical Diagnosis, 438
Budget, Suggestive Budget for Families of Low Income, 1403
Burridge, W., New Physiological Psychology, 285
Buschke, F., Archiv und Atlas der normalen und pathologischen Anatomie in typischen Röntgenbildern, 780
Cabot, H., Surgical Nursing, 1880
Cabot, R. C., Physical Diagnosis, 1881
Campbell, D., Handbook of Therapeutics, 629
Canada, Medicine in Canada, 864
Cancer, Contribucion al estudio anatomo-clinico del cancer del pulmon, 134
Cancer, Einige Carcinome und Adenome beim Menschen, 706
Cancer, Il cancro del retto, 1018
Cancer, Report on Cancer of Skin, 1975
Cancer, Union internationale contre le cancer, 1880
Canuyt, G., Les phlegmons de la loge amygdalienne, 284
Carlisle, G. L., Practical Talks on Heart Disease, 1564
Carlson, A. J., Studies on Possible Intoxicating Action of 3.2 Per Cent Beer, 364
Carrière, G., Le barbiturisme aigu et les antidotismes gardenal, 1331
de Carvalho Lima, J. P., Bacteriologia, 210
de Casadevante, J. F., Nuevas prácticas de farmacia: Farmacoterapia, 1401
Castillo, P. A., Contribución al estudio anatomo-clínico del cáncer del pulmón, 134
Castration, Arbeit und Gesundheit, 628
Catterina, A., L'opération de Bassini, 1331
Cavazzi, F., Vie et rajeunissement, 1881
Ceraz, L., La malattia di Heine-Medin, 438
Chabanier, H., Hypochlorémie et accidents post-opératoires, 629
Chapin, Charles V., Papers: Review of Public Health Realities, 1649
Charles, Twilight of Parenthood, 1730
Chemistry, Aids to Qualitative Inorganic Analysis, 519
Chemistry, Biological, Laboratory Manual, 1401
Chemistry of Flesh Foods and Their Losses on Cooking, 284
Chemistry of Hormones, 516
Chenoweth, L. B., Community Hygiene, 2053
Child Study Association of American Sex Education, 2053
Children, Care and Feeding: Catechism, 1403
Children, Study of Growth and Development, 706
Chinese Medicine, 1095
Chiray, M., Précis de sémiologie médicale appliquée, 865
Cholera: Manual for Medical Profession in China, 285
Chondromas, Röntgendiagnostik der Knochen- und Gelenkkrankheiten, 1977
Citizenship, Doctor and Citizenship, 1095
Clarke, H., Professional Training of Hospital Dietitian, 133
Clerc, A., Problèmes actuels de pathologie médicale, 2051
Clinical Medicine, Précis de sémiologie médicale appliquée, 865
Coelho, E., L'infarctus du myocarde, 1479
Cole, L. G., and others, Radiologic Exploration of Mucosa of Gastro-Intestinal Tract, 706
Collens, W. S., System of Diet Writing, 1095
Colwell, H. A., X-Ray and Radium Injuries, 1094
Commonwealth Fund, Survey of Public Health Nursing, 366
Community Hygiene, 2053
Constipation, Stand Up and Slim Down, 1019
Constitution, Allgemeine Konstitutionslehre, 941
Constitution and Health, 1018
Coughlin, W. T., editor, Rose and Carless' Manual of Surgery, 131
Crile, G., Diseases Peculiar to Civilized Man, 1017
Crime, Doctor Studies Crime, 1259
Cumberbatch, E. P., Essentials of Medical Electricity, 365
Curtis, A. H., Textbook of Gynecology, 1879
Cyanide poisoning, Tratamientos de la intoxicacion cianhidrica, 1477
Cyclopedia of Medicine, 1018
Davis, G. G., Applied Anatomy, 1881
Dennis, F. S., Selected Surgical Papers (1876-1914), 1648
Dentistry, Practical Pedodontia or Juvenile Operative Dentistry and Public Health Dentistry, 210
Dermatology, Common Skin Diseases, 1259
Dermatology, Compend of Diseases of Skin, 1403
Dermatology, Die Haut- und Geschlechtskrankheiten, 439
Dermatology, Lehrbuch und Atlas der Haut- und Geschlechtskrankheiten, 707
Dermatology, Practical Treatise on Diseases of Skin, 1017
Desvernine y Galdos, C. M., Manual de medicina clinico y de laboratorio, 1403
Devine, H., Recent Advances in Psychiatry, 211
Diabetes Mellitus, Die Zuckerkrankheit, 1402
Diabetes Mellitus, Einheitliche Grundlage für die Diättherapie, 437
Diabetes Mellitus, Handbook on Diabetes Mellitus and Its Modern Treatment, 1974
Diabetes Mellitus, Primer for Diabetic Patients, 1976
Diabetic Manual for Patients, 1881
Diagnosis, Essentials of Physical Diagnosis, 438
Diagnosis, Physical Diagnosis, 1881
Diagnostic clinique: Examens et symptomes, 942
Diaphragmatic Spasm, Epidemic Myalgia: Bornholm Disease, 1650
Dickinson, R. L., Human Sex Anatomy, 1095
Dictionary, American Pocket Medical Dictionary, 1095
Dictionary, Manual de medicina clinico y de laboratorio, 1403
Diet, Collens System of Diet Writing, 1095
Diet, Geographie und Geschichte der Ernährung, 705
Diet, Nutrition and Diet Therapy: Textbook of Dietetics, 2052
Diet, Suggestive Budget for Families of Low Income, 1403
Diet, Your Meals and Your Money, 1564
Dietitian, Professional Training of Hospital Dietitian, 133
Diphtheria, Active Immunization Against Diphtheria, 1879
Diseases, Facies dolorosa, 1177
Diseases Peculiar to Civilized Man, 1017
Diseases, Short History of Some Common Diseases, 1018
Dislocations, Frakturen und Luxationen, 864
Doctor and Citizenship, 1095
Donaldson, M., Radiotherapy in Diseases of Women, 865
Dorland, W. A. N., American Pocket Medical Dictionary, 1095
Drugs, Untersuchungsmethoden für Arzneispezialitäten, 1565
Dudley, S. F., Active Immunization Against Diphtheria, 1879
Dujarric de la Rivière, R., L'immunité par mécanisme physico-chimique, 1019
Ear, Archiv und Atlas der normalen und pathologischen Anatomie in typischen Röntgenbildern, 284
Electricity, Essentials of Medical Electricity, 365
Electrocardiography, Student's Handbook of Clinical Electrocardiography, 1800
Electrokinetic Phenomena, 942
Elgood, C., Medicine in Persia, 1330
Ellis, A., Sunshine Preferred, 1565
Embryology, Elements of Experimental Embryology, 1730
Empyema, Beiträge zur Kenntnis der septischen Pleuraempyeme, 211
Endocrines, Our Mysterious Life Glands, 131
Endometriosis, Clinical, Pathogenetic and Experimental Investigations, 1564
Endoscopy, Bronchoscopy, Esophagoscopy and Gastroscopy, 1799
Engelstad, R. B., Über die Wirkungen der Röntgenstrahlen auf die Lungen, 1880
Environment, Heredity and Environment, 64
Erythrocytes, Mammalian Red Cell and Properties of Haemolytic Systems, 133
Espaillat-G, A., Contribution à l'étude radiographique du sein normal et pathologique, 864
Ethics, Código de deontología médica, 1259
Eugenics, Constructive Eugenics and Rational Marriage, 133
Evans, G., Essays on Chronic and Familial Syphilis, 1329
Evans, W., Student's Handbook of Clinical Electrocardiography, 1800
Exercises, Stand Up and Slim Down, 1019
Eye, Atlas Fundus Oculi, 1730
Eye, Atlas of External Diseases, 1259
Eye, Diseases, 1177
Eye Diseases, Ultra-Violet Therapy, 518
Eyes, Ocular Dioptrics and Lenses, 1176
Faber, K., Lærebog i intern medicin, 1649
Facies dolorosa; das schmerzensreiche Antlitz, 1177
Fagge, C. H., Pocket Anatomy, 519
Feinberg, S. M., Allergy in General Practice, 283
Femur, Operative Treatment of Collum Femoris Fractures, 1479
Fèvre, M., Chirurgie infantile d'urgence, 628
Fischel, M. K., Spastic Child, 1403
Fish, Chemistry of Flesh Foods, 284
Flamm, S., Rezeptbuch der Pflanzenheilkunde, 1975
Flandin, C., L'intoxication par les somniferes, 1478
Fleming, A., Recent Advances in Vaccine and Serum Therapy, 133
Fleming, R. M., Study of Growth and Development, 706
Folin, O., Laboratory Manual of Biological Chemistry, 1401
Food, Geographie und Geschichte der Ernährung, 705
Foot, Fuss und Bein, 1404
Foreign Body in Air and Food Passages Roentgenologically Considered, 863
Forman, M. B., editor, John Keats's Anatomical and Physiological Note Book, 1977
Four Leaf Clovers, 1094
Fractures, Frakturen und Luxationen, 864
Frankel, A., Strophanthintherapie zugleich ein Beispiel quantitativer Digitalisanwendung, 438
Franz, S. I., Persons One and Three, 366
Fujikawa, Y., Japanese Medicine, 1330
Gallnler, G., La gangosa et les rhino-pharyngites mutilantes des tropiques, 517
Gallbladder, La cholécystectomie sans drainage, 706
Gangosa, La gangosa et les rhino-pharyngites mutilantes des tropiques, 517
Garland, J., Road to Adolescence, 133
Garrod, L. P., Recent Advances in Pathology, 1095
Gases, war, Leitfaden der Pathologie und Therapie der Kampfgaserkrankungen, 864
Gastinel, G., La syphilis expérimentale, 516
Gastro-Intestinal Tract, Radiologic Exploration of Mucosa, 706
Gastroscopy, Bronchoscopy, Esophagoscopy and Gastroscopy, 1799
Gellerstedt, N., Zur Kenntnis der Hirnveränderungen bei der Normalen Altersinvolution, 131
German Medicine, 1330
Giltner, W., Brucellosis: Public Health Problem, 779
Gonorrhea, Die Haut- und Geschlechtskrankheiten, 1478; 1564
Gonorrhea, La séroréaction blennorragique, 1730
Goodenough, F. L., Developmental Psychology, 780
Goodnow, M., Outlines of Nursing History, 1095
Gorham, F. P., Papers of Charles V. Chapin, M.D., 1649
Graham, B., Security Analysis, 1331
Green's Manual of Pathology, 1565
Growth, Study of Growth and Development, 706
Gütt, A., Gesetz zur Verhütung erbkranken Nachwuchses, 1018
Gundel, M., Die Typenlehre in der Mikrobiologie, 707
Gutierrez, R., Clinical Management of Horseshoe Kidney, 517
Guttmacher, A. F., Life in the Making, 1095
Gynecology, Lehrbuch der operativen Geburtshilfe, 131
Gynecology, Principles of Gynecology (Blair-Bell), 438
Gynecology, Radiotherapy in Diseases of Women, 865
Gynecology, Textbook of Gynecology (Curtis), 1879
Haberling, W., German Medicine, 1330
Hadfield, G., Recent Advances in Pathology, 1095

Book Notices—Continued
Halban, J., Lehrbuch der operativen Geburtshilfe, 131
Haler, D. H., Aids to Pathological Technique, 517
Hambidge, G., Your Meals and Your Money, 1564
Hamill, P., Murrell's What to do in Cases of Poisoning, 2052
Harbitz, R. F., Clinical, Pathogenetic and Experimental Investigations of Endometriosis, 1564
Haro, F., Fases biologicas de la mujer (cartas a Paloma), 1800
Harrington, M., Wish-Hunting in the Unconscious, 1975
Harrow, B., Chemistry of Hormones, 516
Hauduroy, P., Les ultravirus, 1094
Head, Treatment of Injuries, 1401
Health, Charles Oliver Probst: Pioneer Public Health Administrator in Ohio, 1017
Health, Constitution and Health, 1018
Health, Papers of Charles V. Chapin, M.D.: Review of Public Health Realities, 1649
Health, Survey of Public Health Nursing, 366
Heart Disease, Practical Talks, 1564
Heart, Electrocardiography, 2051
Heart, L'infarctus du myocarde, 1479
Heart, Span of Life, 1018
Heart, Student's Handbook of Clinical Electrocardiography, 1800
Heart, That Heart of Yours, 1177
Heart, Vital Cardiology, 1477
Heffter, A., editor, Handbuch der experimentellen Pharmakologie, 132
Hegler, C., Praktikum der wichtigsten Infektions-krankheiten, 1017
Heiberg, K. A., Einige Carcinome und Adenome, 706
Heltzmann, L., Urinary Analysis and Diagnosis, 864
Herbs, Rezeptbuch der Pflanzenheilkunde, 1975
Heredity, Ancestry of Long-Lived, 1477
Heredity and Environment, 64
Heredity, Chances of Morbid Inheritance, 365
Heredity, Gesetz zur Verhütung erbkranken Nachwuchses, 1019
Heredity, Inheritance of Resistance to Bacterial Infection, 2053
Hermodsson, I., Röntgenologische Studien über die traumatischen und habituellen Schultergelenkverrenkungen, 943
Hernia, L'opération de Bassini, 1331
Hertzler, A. E., Surgery of General Practice, 1331
Hesse, F., Allgemeinnarkose und örtliche Betäubung, 865
Hewitt, L. F., Oxidation-Reduction Potentials, 65
Hill, A. B., Inheritance of Resistance to Bacterial Infection in Animal Species, 2053
Hintze, K., Geographie und Geschichte der Ernährung, 705
Hippocrates, Die Werke des Hippokrates, 1259
Hirsch, E. W., Power to Love, 1975
Histology, Die pathologisch-histologischen Untersuchungsmethoden, 364
Histology, Textbook of Histology (Maximow), 1976
Hogeboom, F. E., Practical Pedodontia, 210
Hohmann, G., Fuss und Bein, 1404
Holt, L. E., Jr., Care and Feeding of Children, 1403
Holthusen, H., Grundlagen und Praxis der Röntgenstrahlendosierung, 865
Homosexualismo creador, 943
Hormones, Chemistry of Hormones, 516
Hornbrook, E. A., Stand Up and Slim Down, 1019
Hospital, American Women's Hospitals, Certain Samaritans, 65
Hospital Dietitian, Professional Training, 133
Hospital Manual of Operation, 211
Howell, W. B., Medicine in Canada, 864
Huddleson, I. F., Brucella Infections, 210
Hug, E., Tratamientos de la intoxicacion cianhidrica, 1477
Huxley, J. S., Elements of Experimental Embryology, 1730
Hygiene, Community Hygiene, 2053
Hygiene, Fundamental of Personal Hygiene, 1019
Hygiene, Human Machine: Its Uses and Abuses, 2053
Hygiene, Keeping Young in Business, 1565
Hygiene, Your Germs and Mine, 132
Hypnotics, Schlafmittelmissbrauch, 132
Immunity, L'immunité par mécanisme physico-chimique, 1019
Index, Nauchnaya literatura SSSR, 364
Industrial Death Rates by Occupation, 1258
Industrial Poisoning, Clinical Toxicology, 2052
Infant Feeding, Essentials, 1730
Infants, Les prématurés, 863
Infants, La sténose hypertrophique du pylore, 64
Infection, Bacterial Infection; Dental Practice, 437
Infection, Die Abwehrkräfte des menschlichen Körpers und die Möglichkeit der therapeutischen Beeinflussung, 365
Infection, Inheritance of Resistance to Bacterial Infection, 2053
Infectious Diseases, Die akuten Zivilisationsseuchen, 284
Infectious Diseases, Handbuch der inneren Medizin, 1479
Infectious Diseases, Praktikum der wichtigsten Infektions-krankheiten, 1017
Internal Medicine, Laerebog i intern medicin, 1649
Internal Medicine, Handbuch der inneren Medizin, 1479
Internal Medicine, Lehrbuch der inneren Medizin, 133
International Apothecary Association, Untersuchungsmethoden für Arzneispezialitäten, 1565
International League Against Cancer, Conférence préparatoire tenue le 22 mars 1934, 1880
Intestines, Acute Intestinal Obstruction, 1650
Intestines, Formes chirurgicales de la tuberculose intestinale, 943
Intestines, Leitfaden der einheimischen Wurmkrankheiten des Menschen, 437
Investments, Security Analysis, 1331
Ionization Method for Measuring Intensity and Absorption of Roentgen Rays, 284
Jackson, C., Bronchoscopy, Esophagoscopy and Gastroscopy, 1799
Jackson, C., Foreign Body in Air and Food Passages Roentgenologically Considered, 863
Jacobson, E., You Must Relax, 210
Japanese Medicine, 1330
Jarcho, J., Postures and Practices During Labor Among Primitive Peoples, 1977
Jews, Races, Nations and Jews, 1976
Johanssson, S., Operative Treatment of Collum Femoris Fractures, 1479
John, H. J., Diabetic Manual for Patients, 1881
Joints, Radiology of Bones and Joints, 1565
Kapferer, R., editor, Die Werke des Hippokrates, 1259
Keats, John Keats's Anatomical and Physiological Note Book, 1977
Keeping Young in Business, 1565
Keller, F. E., Four Leaf Clovers, 1094
Key, H., Studien über die Permeabilität der Retina, 1177
Kidneys, Clinical Management of Horseshoe Kidney, 517
Kidneys, Die Praxis der Nierenkrankheiten, 629
Kidneys, Span of Life, 1018
Kidneys, Thérapeutique médicale, 1329
Klenböck, R., Röntgendiagnostik der Knochen- und Gelenkkrankheiten, 1977
Killian, H., Facies dolorosa; das schmerzensreiche Antlitz, 1177
Killian, H., Narkose zu operativen Zwecken, 439
Kitchin, T. D., Doctor and Citizenship, 1095
Korzybski, A., Science and Sanity, 211
Kramer, E., Geschlechtsentstehung und willkürliche Geschlechtsbestimmung, 863
Kronfeld, R., Histopathology of Teeth, 517
Krueger, W. W., Fundamentals of Personal Hygiene, 1019
Labbé, M., Le phosphore, 942
Laboratory, Aids to Pathological Technique, 517
Laboratory Manual of Biological Chemistry, 1400
Lacan, J., De la psychose paranoïaque, 285
Lake, N. C., Surgical Anatomy and Physiology, 1176
Larynx surgery, Bronchoscopy, Esophagoscopy and Gastroscopy, 1799
Lauda, E., Die normale und pathologische Physiologie der Milz, 629
Law, F. W., Ultra-Violet Therapy in Eye Disease, 518
Lazarsfeld, S., Rhythm of Life, 1018
Ledoux-Lebard, R., Manuel de radiodiagnostic clinique, 942
Leg, Fuss und Bein, 1404
Lenses, Ocular Dioptrics and Lenses, 1176
Léon-Kindberg, M., Les dilatations des bronches, 211
Leschke, E., Clinical Toxicology, 2052
Lewin, P., Textbook of Orthopedic Surgery for Nurses, 1093
Library, How to Use a Medical Library, 1258
Lichtenstein, P. M., Doctor Studies Crime, 1259
Lichtwitz, L., Die Praxis der Nierenkrankheiten, 629
Life Against Death, 1095
Life in the Making, 1095
Life, Span of Life, 1018
Löhr, W., Archiv und Atlas der normalen und pathologischen Anatomie in typischen Röntgenbildern, 865
Loeper, M., Thérapeutique médicale, 1329
Longevity, Ancestry of the Long-Lived, 1477
Lovejoy, E. P., Certain Samaritans, 65
Low, R. C., Common Diseases of the Skin, 285
Luck, J. M., Annual Review of Biochemistry, 1094
Luckiesh, M., Seeing and Human Welfare, 366
Lungs, Contribucion al estudio anátomo-clinico del cáncer del pulmón, 134
Lungs, Medicación local pulmonar por via intratraqueal, 1018
Lungs, Über die Wirkungen der Röntgenstrahlen auf die Lungen, 1880
McCance, R. A., Chemistry of Flesh Foods and Their Losses on Cooking, 284
McIver, M. A., Acute Intestinal Obstruction, 1650
Mackie, T. J., Introduction to Practical Bacteriology, 707
McLean County Medical Society, Biographical History, 1259
Magnus, G., Frakturen und Luxationen, 864
Maher, C. C., Electrocardiography, 2051
Mall, Franklin Paine Mall: The Story of a Mind, 2053
Marriage, Chances of Morbid Inheritance, 365
Marriage, Constructive Eugenics, 133
Martin, P., Pubertad: Diario de una Colegiala, 1730
Martineck, Arbeit und Gesundheit, 628
Martinet, A., Diagnostic clinique, 942
Materia Medica, Merck Manual, 65
Materia Medica, Textbook, 1974
Matsner, E. M., Technique of Contraception, 2053
Maximow, A. A., Textbook of Histology, 1976
Meaker, S. R., Human Sterility, 1799
Meat, Chemistry of Flesh Foods, 284
Medical Service, Summary of Pennsylvania's Poor Relief Laws, 1329
Medicine, Chinese Medicine, 1093
Medicine, Cyclopedia of Medicine, 1018
Medicine, Electrokinetic Phenomena, 942
Medicine, German Medicine, 1330
Medicine, history, Biographical History of Members of McLean County Medical Society, 1259
Medicine in Canada, 864
Medicine in Persia, 1330
Medicine, Japanese Medicine, 1330
Medicine, Les ordonnances du médecin praticien, 1259
Medicine, Manual de medicina clinico y de laboratorio, 1403
Medicine, Manual of Practice of Medicine, 1648
Medicine, Modern Treatment in General Practice, 1649
Medicine, One Hour of Medical History, 1259
Medicine, Recent Advances, 518
Medicine, Textbook of Practice of Medicine, 1018
Melchior, E., Nachbehandlung nach chirurgischen Eingriffen, 439
Meningioma, Die parasagittalen Meningeome, 366
Mental Defect, 2052
Mental Deficiency, Investigations into Cause of Mental Deficiency, 781
Mental Deficiency Nursing (Simplified), 2053
Mental Hygiene in the Community, 628
Merck Manual of Therapeutics and Materia Medica, 65
Metabolism, Stoffwechselprobleme, 439
Metals, Handbuch der experimentellen Pharmakologie, 132
ben Meyr, B., Your Germs and Mine, 132
Midwifery for Nurses, 941
Miller, A., Modern Advances in Diseases of the Throat, 1800
Milton's Blindness, 1018
Mirizzi, P. L., La cholécystectomie sans drainage, 706
Mittermaier, R., Archiv und Atlas der normalen und pathologischen Anatomie in typischen Röntgenbildern, 284
Moreaux, A., Cours élémentaire de dessin d'anatomie du squelette, 943
Morrill, W. P., Hospital Manual of Operation, 211
Morse, W. R., Chinese Medicine, 1093
Morton, L. T., How to Use a Medical Library, 1258
Mother and Child, Mat I Ditya, 133
Mouth, Pathologie buccale: Péri-buccale et d'origine buccale, 779
Muñoyerro, L. A., Código de deontologia médica, 1259
Muntsch, O., Leitfaden der Pathologie und Therapie der Kampfgaserkrankungen, 864
Murrell's What to do in Cases of Poisoning, 2052
Muscle, Spastic Child, 1403
Mygind, S. H., Les syndromes ménièriques, 1401
Naegell, O., Allgemeine Konstitutionslehre, 941
Neame, H., Atlas of External Diseases of Eye, 1259
Negro Professional Man and the Community, 439
Nephritis and Allied Diseases, 1800
Neurosyphilis, Une nouvelle syphilis nerveuse, 366
Nicole, J. E., Psychopathology, 1800
Nin Frias, A., Homosexualismo creador, 943
Nobécourt, P., Traité de médecine des enfants, 518
Normand, L., Einheitliche Grundlage für die Diättherapie des Diabetes mellitus, 437
Nose, Archiv und Atlas der normalen und pathologischen Anatomie in typischen Röntgenbildern, 284
Nurses, Midwifery, 941
Nurses, Textbook of Orthopedic Surgery, 1093
Nursing, Art and Principles, 1976
Nursing History, Outlines, 1095
Nursing Procedures, 1401
Nursing, Surgical Nursing, 1880
Nursing, Survey of Public Health Nursing, 366
Nutrition and Diet Therapy, 2052
Nutrition Program and Teaching Outline Developed for Use in Health Centers, Philadelphia, 1976
Nuzum, F. R., Span of Life, 1018
Obesity Chart, Collens System of Diet Writing, 1095
Obesity, Stand Up and Slim Down, 1019
Obstetric Medicine, 364

Book Notices—Continued
Obstetrics, Midwifery for Nurses, 941
Obstetrics, Posture and Practices during Labor Among Primitive Peoples, 1977
Odoratus Sexualis, 1259
Old Age, Zur Kenntnis der Hirnveränderungen bei der Normalen Altersinvolution, 131
Olivecrona, H., Die parasagittalen Meningeome, 366
Ophthalmology, Diseases of Eye, 1177
Ormsby, O. S., Practical Treatise on Diseases of Skin, 1017
Orthopedic Surgery, Textbook for Nurses, 1093
Osteomas, Röntgendiagnostik der Knochen- und Gelenkkrankheiten, 1977
Oxidation-Reduction Potentials, 65
de Pablo, V., Medicación local pulmonar por via intratraqueal, 1018
Paralysis, Spastic Child, 1403
Parasitism and Disease, 1257
Parenthood, Twilight of Parenthood, 1730
Parsons, J. H., Diseases of Eye, 1177
Parsons, T. R., Fundamentals of Biochemistry, 519
Paterson, R. G., editor, Charles Oliver Probst, 1017
Pathological Anatomy, Atlas of Selected Cases, 941
Pathological Technique, Aids, 517
Pathology, Die pathologisch-histologischen Untersuchungsmethoden, 364
Pathology, Green's Manual, 1565
Pathology, Problèmes actuels de pathologie médicale, 2051
Pathology, Text-Book (Bell's), 1879
Pathology, Text-Book (Boyd's), 1564
Pearl, R., Ancestry of Long-Lived, 1477
Pearl, R., Constitution and Health, 1018
Pearn, O. P. N., Mental Deficiency Nursing (Simplified), 2053
Pediatrics, Essentials of Infant Feeding and Pediatric Practice, 1730
Pediatrics, Traité de médecine des enfants, 518
Pemberton, R., Medical and Orthopaedic Management of Chronic Arthritis, 705
Pennsylvania's Poor Relief Laws, 1329
Penrose, L. S., Mental Defect, 2052
Persons One and Three, 366
Pettinari, V., Il cancro del retto, 1018
Pharmacology, Handbuch der experimentellen Pharmakologie, 132
Pharmacology, Nuevas prácticas de farmacia, 1401
Philadelphia Child Health Society, Nutrition Program and Teaching Outline, 1976
Philadelphia General Hospital, Nursing Procedures, 1401
Phosphorus, Le phosphore, 942
Physical Diagnosis, 1881
Physical Education, Corrective, 865
Physicians, Life Against Death, 1095
Physicians, women, Certain Samaritans, 65
Physiology, Applied Physiology, 1176
Physiology, Features in Architecture of Physiological Function, 517
Physiology, Fundamentals of Biochemistry, 519
Physiology, John Keats's Anatomical and Physiological Note Book, 1977
Physiology, Surgical Anatomy and Physiology, 1176
Piersol, G. M., Cyclopedia of Medicine, 1018
Piéry, M., Thérapeutique hydro-climatique des maladies non tuberculeuses de l'appareil respiratoire, 1565
Platt, R., Nephritis and Allied Diseases, 1800
Poetry, Four Leaf Clovers, 1094
Pohlisch, K., Schlafmittelmissbrauch, 132
Poisoning, Clinical Toxicology, 2052
Poisoning, Murrell's What to do in Cases of Poisoning, 2052
Poliomyelitis, La malattia di Heine-Medin, 438
Ponder, E., Mammalian Red Cell and Properties of Haemolytic Systems, 133
Pope, A. E., Art and Principles of Nursing, 1976
Population, Twilight of Parenthood, 1730
Pottenger, F. M., Tuberculosis in Child and the Adult, 1177
Poucel, J., La sténose hypertrophique du pylore chez le nourrisson, 64
Pregnancy, Obstetric Medicine, 364
Pregnancy, Prospective Mother: Handbook for Women, 1329
Preisseker, E., Lumbalanästhesie in der Geburtshilfe und Gynäkologie, 1258
Price, F. W., editor, Textbook of Practice of Medicine, 1018
Prison physician, Doctor Studies Crime, 1259
Probst, Charles Oliver, Pioneer Public Health Administrator in Ohio, 1017
Prostate Gland, Dangerous Age in Men, 1977
Protozoa, Textbook of Bacteriology, 1331
Proudfit, F. T., Nutrition and Diet Therapy, 2052
Psychiatry, Recent Advances, 211
Psychoanalysis, Wish-Hunting in the Unconscious, 1975
Psychology and Psychotherapy, 781
Psychology, Developmental Psychology, 780
Psychology, New Physiological Psychology, 285
Psychology, Pubertad: Diario de una colegiala, 1730
Psychopathology: Survey of Modern Approaches, 1800
Psychosis, De la psychose paranoïaque, 285
Psychotherapy, Psychology and Psychotherapy, 781
Pubertad: Diario de una colegiala, 1730
Pylorus, La sténose hypertrophique du pylore chez le nourrisson, 64
Races, Erblehre und Rassenhygiene in völkischen Staat, 1095
Races, Nations and Jews, 1976
Radiations, Eine Methode zur Messung von Röntgen- Radium- und Ultrastrahlung, 285
Radiology, Manuel de radiodiagnostic clinique, 942
Radiology of Bones and Joints, 1565
Radiotherapy in Diseases of Women, 865
Radium Injuries, Prevention and Treatment, 1094
Rathbone, J. L., Corrective Physical Education, 865
Ravaut, P., Une nouvelle syphilis nerveuse, 366
Ravina, A., L'année thérapeutique, 65
Rectum, Il cancro del retto, 1018
Reed, J. V., Treatment of Injuries of Head and Spine, 1401
Rejuvenation, Vie et rajeunissement, 1881
Relaxation, You Must Relax, 210
Rème, B., La séroréaction blennorragique, 1730
Reproduction, Human Sex Anatomy, 1095
Reproduction, Life in the Making, 1095
Respiratory Tract, Thérapeutique hydro-climatique des maladies non tuberculeuses, 1565
Retina, Studien über die Permeabilität der Retina, 1177
Rheumatism, Die Tastmassage, 781
Rheumatism, Rheumaprobleme, 943
Rhino-pharyngitis, La gangosa et les rhino-pharyngites mutilantes des tropiques, 517
Rhythm of Life, 1018
Robinson, W. J., Our Mysterious Life Glands, 131
Robson, J. M., Recent Advances in Sex and Reproductive Physiology, 941
Roch, M., Les traitements de l'hypertension artérielle, 779
Roentgen Rays, Die klinische Röntgendiagnostik der inneren Erkrankungen, 1565
Roentgen Rays, Grundlagen und Praxis der Röntgenstrahlendosierung, 865
Roentgen Rays, Radiologic Exploration of Mucosa of Gastro-Intestinal Tract, 706
Roentgen Rays, Röntgendiagnostik der Knochen- und Gelenkkrankheiten, 1977
Roentgen Rays, Study of Ionization Method for Measuring Intensity and Absorption, 284
Roentgen Rays, Über die Wirkungen der Röntgenstrahlen auf die Lungen, 1880
Roentgen Rays, X-Ray and Radium Injuries, 1094
Roentgenology, Archiv und Atlas der normalen und pathologischen Anatomie in typischen Röntgenbildern, 284; 780
Roentgenology, Foreign Body in Air and Food Passages, 863
Roentgenology, Röntgenologische Studien über die traumatischen und habituellen Schultergelenkverrenkungen, 943
Rose and Carless' Manual of Surgery, 131
Rousseau-Decelle, Pathologie buccale, 779
Roxburgh, A. C., Common Skin Diseases, 1259
de Rudder, B., Die akuten Zivilisationsseuchen: Masern, 284
Rüdin, E., editor, Erblehre und Rassenhygiene im völkischen Staat, 1095
Ruhmann, W., Die Tastmassage, 781
Rural Life, National Policies Affecting, 284
Russ, S., X-Ray and Radium Injuries, 1094
Russia, Mat I Ditya: Mother and Child, 133
Russia, Nauchnaya literatura SSSR, 364
Sabin, F. R., Franklin Paine Mall, 2053
Scamman, C. L., editor, Papers of Charles V. Chapin, M.D., 1649
Schamberg, J. F., Compend of Diseases of Skin, 1403
Schild, E., Beiträge zur Kenntnis der septischen Pleuraempyeme, 211
Schmorl, G., Die pathologisch-histologischen Untersuchungsmethoden, 364
Schwesinger, G. C., Heredity and Environment, 64
Science and Sanity, 211
Security Analysis, 1331
Serum, Le sérum normal, 1017
Serum therapy, Recent Advances, 133
Sex Education: Facts and Attitudes, 2053
Sex, Fases biologicas de la mujer (cartas a Paloma), 1800
Sex, Genealogy, 1176
Sex, Geschlechtsentstehung und willkürliche Geschlechtsbestimmung, 863
Sex, Human Sex Anatomy, 1095
Sex-Hygiene: What to Teach and How to Teach It, 1976
Sex, Life in the Making, 1095
Sex, Odoratus Sexualis, 1259
Sex, Power To Love: A Psychic and Physiologic Study of Regeneration, 1975
Sex, Recent Advances in Sex and Reproductive Physiology, 941
Sex, Rhythm of Life: Guide to Sexual Harmony for Women, 1018
Sex Teaching, New Patterns, 1976
Sex, Woman as Sexual Criminal, 1018
Shipp, H. L., Chemistry of Flesh Foods and Their Losses on Cooking, 284
Siegel, M., Constructive Eugenics and Rational Marriage, 133
Sievert, R. M., Eine Methode zur Messung von Röntgen-, Radium- und Ultrastrahlung, 285
Sinusitis, Chronic Nasal Sinusitis, 365
Skeleton, Cours élémentaire de dessin d'anatomie du squelette, 943
Skin, Common Diseases of Skin (Low), 285
Skin, Compend of Diseases (Schamberg), 1403
Skin, Die Haut- und Geschlechtskrankheiten, 439
Skin, Lehrbuch und Atlas der Haut- und Geschlechtskrankheiten, 707
Skin, Practical Treatise on Diseases of Skin (Ormsby), 1017
Skin, Report on Cancer of Skin, 1975
Siemons, J. M., Prospective Mother, 1329
Smith, S. C., That Heart of Yours, 1177
Smith, T., Parasitism and Disease, 1257
Sokoloff, B., Vitality, 1094
Soldier in Science, Autobiography of Bailey K. Ashford, Colonel, M.C., U.S.A., 1977
Spector, B., One Hour of Medical History, 1259
Spine, Treatment of Injuries, 1401
Spleen, Die normale und pathologische Physiologie der Milz, 629
Starck, H. P., Volumetric Analysis, 1649
Sterility, Human Sterility, 1799
Sterilization, sexual, Gesetz Verhütung erbkranken Nachwuchses, 1018
Stevens, A. A., Manual of Practice of Medicine, 1648
Stokes, J. H., Modern Clinical Syphilology, 627; (correction) 1002
Stone, C. T., Dangerous Age in Men, 1977
Strain, F. B., New Patterns in Sex Teaching, 1976
Strophanthintherapie zugleich ein Beispiel quantitativer Digitalisanwendung nach pharmakologischen Grundsätzen, 438
Sunshine Preferred, 1565
Surgery, Chirurgie infantile d'urgence, 628
Surgery, Diseases Peculiar to Civilized Man, 1017
Surgery, Lehrbuch der operativen Geburtshilfe, 131
Surgery, Nachbehandlung nach chirurgischen Eingriffen, 439
Surgery of General Practice, 1531
Surgery, Orthopedic, Textbook for Nurses, 1093
Surgery, Rose and Carless' Manual, 131
Surgery, Selected Surgical Papers (1876-1914) (Dennis), 1648
Surgery, Surgical Anatomy and Physiology, 1176
Surgery, Surgical Nursing, 1880
Sylvest, E., Epidemic Myalgia: Bornholm Disease, 1650
Syphilis, Essays on Chronic and Familial Syphilis, 1329
Syphilis, La syphilis expérimentale, 516
Syphilology, Modern Clinical, 627; (correction) 1002
Szidat, L., Leitfaden der einheimischen Wurmkrankheiten, 437
Teeth, Bacterial Infection, 437
Teeth, Histopathology, 517
Tenenbaum, J., Races, Nations and Jews, 1976
Testicle extract injection, Vie et rajeunissement, 1881
Thannhauser, S. J., Stoffwechselprobleme, 439
Therapeutics, L'année thérapeutique, 65
Therapeutics, Handbook of Therapeutics, 629
Therapeutics, Merck Manual, 65
Therapeutics, Modern Treatment in General Practice, 1649
Therapeutics, Textbook of Materia Medica and Therapeutics, 1974
Therapeutics, Thérapeutique médicale, 1329
Thesing, C., Genealogy of Sex, 1176
Thomas, G. M., Report on Cancer of Skin, 1975
Thoræus, R., Study of Ionization Method for Measuring Intensity and Absorption of Roentgen Rays, 284
Throat, Modern Advances in Diseases of Throat, 1800
Tonsils, Les phlegmons de la loge amygdalienne, 284
Toxicology, Clinical Toxicology, 2052
Toxicology, Murrell's What to do in Cases of Poisoning, 2052
Trauma, Die Abwehrkräfte des menschlichen Körpers und die Möglichkeit der therapeutischen Beeinflussung, 365
Tropical Typhus, Researches, 780
Tuberculosis, Ergebnisse der gesamten Tuberkuloseforschung, 1330
Tuberculosis, Formes chirurgicales de la tuberculose intestinale, 943
Tuberculosis in Child and Adult, 1177
Typhus, Researches on Tropical Typhus, 780
Ultra-Violet Therapy in Eye Disease, 518
Ultraviruses, Les ultravirus, 1094
Undulant Fever, Brucella Infections in Animals and Man, 210
Undulant Fever, Brucellosis: A Public Health Problem, 779
Urinary Analysis and Diagnosis, 864
Vaccine Therapy, Recent Advances, 133

Book Notices—Continued
Vaughan, J. M., Anaemias, 1330
Vehrs, G. R., Spinal Anesthesia, 439
Venereal Diseases, Die Haut- und Geschlechtskrankheiten, 1478
Vertigo, aural, Les syndromes ménièriques, 1401
Vignes, H., Les prématures, 863
Vines, H. W. C., Green's Manual of Pathology, 1565
Vision, Seeing and Human Welfare, 366
Vital Statistics, Death Rates by Occupation, 1258
Vitality, 1094
Vitamin B, Contribution to Problem of Relationship Between B Vitamins and Protein, Fat and Carbohydrate Contents of Food, 1881
Vogt-Möller, P., Contribution to Problem of the Relationship Between B Vitamins and Protein, Fat and Carbohydrate Contents of Food, 1881
Voice, La gangosa et les rhinopharyngites mutilantes des tropiques, 517
Volumetric Analysis, 1649
de Vries, W. M., Atlas of Selected Cases of Pathological Anatomy, 941
Wakeley, C. P. G., Modern Treatment in General Practice, 1649
War gases, Leitfaden der Pathologie und Therapie der Kampfgaserkrankungen, 864
Watson-Williams, P., Chronic Nasal Sinusitis, 365
Weiss, E. B., Keeping Young in Business, 1565
Werthemann, A., Die Abwehrkräfte des menschlichen Körpers und die Möglichkeit der therapeutischen Beeinflussung, 365
Whitney, J. S., Death Rates by Occupation, 1258
Wildenskov, H. O., Investigations into the Cause of Mental Deficiency, 781
Wilder, R. M., Primer for Diabetic Patients, 1976
Williamson, R., Vital Cardiology, 1477
Wilmer, W. H., Atlas Fundus Oculi, 1730
Winter, G., Lehrbuch der operativen Geburtshilfe, 131
Wish-Hunting in the Unconscious, 1975
Woman as Sexual Criminal, 1018
Woodson, C. G., Negro Professional Man, 439
Worcester, A., Sex-Hygiene: What to Teach and How to Teach It, 1976
Wright, H. P., Essentials of Infant Feeding and Paediatric Practice, 1730
Wright, S., Applied Physiology, 1176
Wu, L. T., Cholera, 285
Wulffen, E., Woman as Sexual Criminal, 1018
You Must Relax, 210
Your Meals And Your Money, 1564
Zieler, K., editor, Die Haut- und Geschlechtskrankheiten, 439; 707; 1478; 1564
Zinsser, H., Textbook of Bacteriology, 1331
Zoology, Anatomy of Animal Types, 1259

C

C C C Camps: See Camps
C W A: See Civil Works Administration
CACHEXIA: See Pituitary Body
CADAVERS, preparation for dissection, 1646
CAF-ACETAN, 205—BI
CAFFEINE: See also Coffee
  effect on blood pressure, [Horst] 1986—ab
  gastric ulcers produced by, [Hanke] 721—ab
CAL SPA Mineral Water, 697—BI
CALCANEUM fractures, acute, [Forrester] 1405—ab
CALCIFICATION: See also Brain cortex; Gallbladder
  calcinosis of childhood, [Turpin] 1994—ab
CALCITE, peritoneal tissue response to, [Miller & others] *909; *910
CALCIUM, antidote to respiratory depression, 1475
  Aspirin: See Chorea
  Carbonate: See also Osteomyelitis
  carbonate, peritoneal tissue response to, [Miller & others] *909; *911
  Chloride: See also Ascites; Edema
  chloride, intravenously, median nerve palsy produced by, [Stevens] 376—ab
  deposits in bronchial tubes, 1254
  effect on blood platelets, [Savagnone] 222—ab
  effect on fracture healing, [Haldeman] 1334—ab
  effect on local atrophy and bone union, [Fischer] 869—ab
  Gluconate: See also Cramps
  gluconate, effects on coagulation time, 626
  in Blood: See Blood
  in foods, 414—E
  induced deposition in lung tissue, [Hunter] 1892—ab
  intravenously, use, 1560
  metabolism, effect of diets on, 1857—E
  metabolism in arthritis, [Hartung] 1884—ab
  metabolism in osteomalacia, [Hannon] 1411—ab
  metabolism, sclerodermia relation to, [Paggi] 877—ab
  Ortho-Iodoxybenzoate: See Arthritis
  Oxalate in Urine: See Urine
  salts vs. effect of vitamins A and D, [Møllgaard] 382—ab
  Treatment: See Brain injury
CALCULI: See Gallbladder; Kidney; etc.
CALF: See under Legs
CALIFORNIA Fruit Growers Exchange advertising, 1379
  Home Brand (chili sauce) 110; (tomato catsup) 261
  Prunes educational advertising, 1453
  Pure Puritas Drinking Water, 564
CALMETTE Vaccination: See Tuberculosis, immunization, B C G
CALORIES, calorigenic action of thyroid, [Lerman] 216—ab
CAMBRIDGE University, why it wins the boat race, 690
CAMPS, C C C, malaria outbreak in, Iowa, 999
  for diabetic children, Philadelphia, 687
  lumber, sanitation, New Hampshire, 1385
CANADA, discovery, celebrate fourth centenary, 935
CANADIAN Medical Association, 53; (meets with A. M. A.), 1710—E
CANCER: See also Adenocarcinoma; Endarteritis, carcinomatous; Epithelioma; under specific organs and regions as Breast; Cecum; Skin; Uterus
  British Empire Cancer Campaign, report, 765
  cell reactions in lymph nodes draining sites of, [Welsh] 1811—ab
  clinic, Atlanta, 49
  committees (hospital), Salt Lake City, 1862
  conference (regional), Pennsylvania, 615
  diabetes mellitus and, [Marble] 1102—ab
  diagnosis, Ascoli's seroreaction, [Vercesi] 1659—ab
  diagnosis, Links' serum, [Webber] 1815—ab
  diagnosis, specific principle in urine, [Aron] 450—ab
  etiology, aluminum, 1719
  etiology, arsenic, [Franseen] 1885—ab
  etiology, Siphonospora polymorpha (Brehmer), 1077
  exhibit at New York State Fair, 845
  in youth, [Ross] 521—ab
  industrial, cotton spinners' cancer: specification of a safe oil, 1959
  Institute: See also Cancer research
  Institute, Bowman, at U. of Wisconsin, 1630
  institute, Faculté de Médecine, 500
  is a federal law necessary? Germany, 423
  meeting, Colorado, 843
  metastases from bronchus, 201
  metastases, gastro-intestinal tract to liver, [Marting] 73—ab
  metastases in squamous cell carcinoma, [Price] 1567—ab
  mortality, England, 1388
  nostrum, Koch outfit sued, 116
  pain of, chordotomy for, [Polenov] 955—ab
  pain of, intraspinal (subarachnoid) alcohol injection for, [Saltzstein] *242
  pain of, use of dilaudid, [Stroud] *1421
  pituitary anterior lobe hyperactive in, [Wyeth] 772—C
  prevalence, is it becoming more so? 113—E
  problem today, [MacCarty] *857
  program, Indiana, 1384
  program (state), Kansas, 1241
  research, American Association for, 1317
  research at Hebrew University, 197
  research, British Empire Cancer Campaign report, 765
  research, conference, Philadelphia, 1785
  research institute completed, Japan, 770
  transplant (heterologous), 693
  treatment, Brehmer's, exploded, 1077
  treatment, chemotherapy (specific), [Eggers] 1888—ab
  treatment, magnesium chloride, [Craig] 1984—ab
  treatment, radiation, [Christie] *985
  treatment, radiosensitivity, problem, [Cutler] *1204
  treatment, radium, advances in, 765; 1864
  Treatment, Roentgen: See also Lips, cancer
  treatment, roentgen, [Coutard] 716—ab
CANDY, Curtiss Milk Nut Loaf, 1379
  Norris Juvenile Candies Dextrose Special, 838
CANKER Sore: See Stomatitis, aphthous
CANTACUZINO, JEAN, death, 424
CANTANI Reaction: See Syphilis, serodiagnosis
CAPILLARIES, permanently dilated, treatment of red nose due to, 625
  pressure and permeability, 920—E
  resistance, [Schultzer] 1998—ab
  Resistance Test: See Scurvy
CAPILLAROSCOPY studies in allergic diseases, [Hantschmann] 1897—ab
CAPITOL Dairy Vitamin D Milk, 1151
CAPSULES: See Bacteria
CARAWAY seeds, toxicity, 777
CARBARSONE: See Amebiasis, treatment
CARBOHYDRATES, body acidity and, 701
  digestion (gastric) of proteins vs., [Rehfuss] *1600
  in liver function test, [Pavel] 144—ab
  metabolism and tuberculous pulmonary infiltrates, [von Mettenheim] 1108—ab
  metabolism, hypophyseal regulation, [Anselmino] 879—ab
  metabolism vs. hypophysis, hypothalamus and autonomic nervous system, [Davis] 1887—ab
  oxalic acid exchange, relation to splenectomy, 693
CARBON: See Guaiacol carbonate
  Arc Lamps: See Ultraviolet Rays
  black, dangers, 2048
CARBON DIOXIDE tension, culturing bacteria requiring, [Dickens] 528—ab
  hyperventilation and aeration of lungs, [Beecher] 1989—ab
CARBON DISULPHIDE poisoning, 433
CARBON MONOXIDE, chronic action of small amounts, [Hofmann] 455—ab
  effects of exhaust gases of autos, 850
  poisoning, [Martland] *643; [Henderson] *835
CARBON TETRACHLORIDE, industrial hazard, [Davis] *962 (correction) 1787
  industrial hazard in hat cleaning, 1013
CARBONATED Water: See Water
CARBORUNDUM: See Silicon carbide
CARBUNCLE, chronic, 128
  treatment, [Fantus] *1066
  treatment, bacteriophage, [Eaton & Bayne-Jones] *1774
CARCINOMA: See Cancer
CARDIOVASCULAR DISEASE, institute, Cincinnati, 1160
  phases indicating abortion, [Herrick] *1902
  seminars on, Philadelphia, 1862
  syphilis, relation to neurosyphilis, [Healey] 1184—ab
  syphilis, suspected, 1970
CARDITIS: See Heart inflammation
CARIES: See Teeth
CARNRICK Trypsogen, 1782—E
CAROTENE in human tissue, 850
  SMACO, 340
  utilization of, and liquid petrolatum, 1540—E
CAROTID BODY, tumor, [Abbott & Stephenson] *21; [Cragg] 1983—ab
CAROTID SINUS and sudden anesthetic death, [Downs] 711—ab
  in mechanism of acute pulmonary edema, [Salmon] 1106—ab
CARPUS: See Wrist
CARRIERS: See Amebiasis; Pneumococcus; Scarlet Fever; Typhoid; Undulant Fever
CARRIGAN'S Niagara Dairy Co. Vitamin D Milk, 1709
CARROTS: See also Carotene
  Stokely's for Baby, 189
CASE History; Records: See Diagnosis
  Work: See Psychoanalysis
CASTOR BEAN dust sensitization, [Bennett] 137—ab
CASTOR OIL: See Labor, induction
CASTRATION, effects in adult male, [McCullagh & Renshaw] *1140
  roentgen, hypophysis changes after, [Stöckl] 79—ab
CASTS, plaster-of-paris, preserving cleanliness with lacquer, [Greeley] 125—C
  plaster-of-paris, value in pulmonary tuberculosis, [Glroné] 953—ab
CATALASE in Blood: See Blood
CATALYN, 1873—BI
CATALYSIS: See Blood
CATAPHORESIS: See also Ionization
  to control specificity of streptococcic vaccines, [Rosenow] 217—ab
CATARACT, diabetic, [O'Brien & others] *892
  irradiation, [Schläpfer] 878—ab; [Milner] 1657—ab
  operation in exophthalmic eye, 130
  operation, intracapsular (Indian), 1877
  parathyroid, rôle of tetany in, [Evans] 1333—ab
CATERPILLAR: See Moth
CATHARTICS: See also Enema
  A. B. & S. Pill, [Yonkman & Singh] *1931
  purgation in anthelmintic treatment, [Brown] *652
CATHETER: See Nose
CATHETERIZATION: See Ureter
CATHINE, khat habit in Orientals, 61
CATS, convulsions in, 514
CATSUP: See Tomatoes
CATTLE: See Tuberculosis, bovine; Undulant Fever
CAUTERIZATION: See Hay Fever treatment
CAVERNOUS SINUS, thrombophlebitis, 504
CECOCOLON: See Colon
CECUM cancer, chances for cure? [Dixon] *1605
  cicatrizing enteritis involving, [Donchess] 711—ab
  polyp on occluded base of appendix, [Strauss] *182
CEDAR HILL BRAND (syrup) 1229; (tomato juice) 1379
CELLS: See also Cancer; Erythrocytes; Leukocytes
  Giant Cell: See Tumors
  Lipoid Cell Pneumonia: See Pneumonia, lipoid
  mitogenetic radiations, 1320
  Spindle: See Sarcoma
CELLU JUICE-PAK (pineapple) 189; (pears) 341; (cherries) 564; (peaches) 564; (apricots) 755
CELLULITIS of pelvic tissues, 1475
  perirectal streptococcic, [Hayes] 1179—ab
CEMENT, handy repair, vertigo from, 281
  industry, hazards, 62
  Portland, peritoneal tissue response to, [Miller & others] *909; *911

CENTENARIANS: See under Old Age
CENTRAL Society for Clinical Research, 1717
CENTRELLA Brand Chocolate, 260
CENTURY of Progress, A. M. A. exhibit, 1239
CEPHALALGIA: See Headache
CEREALS, Kellogg's Whole Wheat Biscuit, 839
Sims Malt-O-Wheat Breakfast, 413
CEREBELLUM atrophy (sclerotic), [Hassin] 293—ab
degeneration (subacute) in elderly, [Greenfield] 789—ab
CEREBROSPINAL FLUID, albuminoid reaction of superposition in, [Görriz] 1029—ab
anticerebral reagin in dementia paralytica and tabes, [Demanche] 1265—ab
artificial, preparation; indication for injecting, [Hartmann] *1351; *1353
calcium in, [Katzenelbogen] 1102—ab
chlorides in meningitis, [Finkelstein] 791—ab
creatinine in, [Lickint] 535—ab
diastase in poliomyelitis, [Eckardt] 147—ab
drainage (forced) in gastric crisis, [Fellows] 1886—ab
dynamics (normal) in spinal cord tumor, [Poppen & Hurxthal] *391
globin in, [Emiliani] 1995—ab
gonorrheal serum reaction in, [Gadrat] 791—ab
pH, [Harris] 1496—ab
in inguinal lymphogranuloma, [Kitagawa] 301—ab
pressure, factors that act on, 1465
pressure in heart failure, [Friedfeld] 72—ab
reaction, [Ambrus] 303—ab
spirochetal extract in syphilitic changes in, [Marquardt] 1187—ab
test, Lange colloidal gold test modified, [Boerner] 444—ab
test, tryptophan in tuberculous meningitis, [Rosenblatt] 441—ab
treatment (autospinal fluid) in poliomyelitis, [Török] 1414—ab
tubercle bacilli (Löwenstein method) in nervous disorders, 503
CEREBROSPINAL SYPHILIS: See Neurosyphilis
CERE-JEL, Beech-Nut Pressure Cooked Oatmeal, 29
CERVICITIS: See Gonorrhea; Uterus
CESAREAN SECTION, anesthesia (spinal) in, danger, [Franken] 1578—ab
normal delivery after, 1470; (reply: placental site factor) [Hewitt] 2050
what do pelvic measurements indicate, 1255
CEVITAMIC Acid: See Acid
CHALLENGE Butter, 1779
CHANCRE: See also Pyodermia
redux, reinfection in, [Klauder] 1886—ab
CHANCROID, therapy, [Fantus] *1853
CHARCOL Injection: See Infections, treatment
CHARITY Hospital: See Hospitals
CHARLES, RICHARD HAVELOCK (Sir), death, 1461
CHAULMOOGRA injections, benzylephedrine as analgesic, [Feng] 634—ab
CHEEK, removal of mole from, 1561
CHEILITIS, actinic, [Anderson & Ayres] *1283
CHEMICAL Warfare: See Gas warfare
CHEMISTRY, bacterial, research in, 421
CHEMOTHERAPY: See Cancer, treatment
CHENEY'S Red Clover Flowers, 697—BI
CHENOPODIUM Oil: See Ascariasis
CHERRIES, Cellu Juice-Pak, 564
CHERRY HILL Dairy Vitamin D Milk, 1623
CHEST, response of peritoneal tissue to, [Miller & others] *910; *911
CHEST: See Thorax
CHESTNUT FARMS-Chevy Chase Vitamin D Milk, 341
CHEYNE-STOKES Respiration: See Respiration
CHICAGO Society of Industrial Medicine and Surgery, [Nordholz] 1641—C; 1863
CHICKENPOX, pustulous, 509
zoster relation to, [Amies] 1891—ab
CHIEFFI-AURICCHIO Reaction: See Leishmaniosis
CHILDBIRTH: See Labor; under Medicolegal Abstracts at end of letter M
CHILDREN: See also Adolescence; Infants; Pediatrics; under names of specific diseases as Diabetes Mellitus; Syphilis; Tuberculosis; etc.
adoption practices, [Jenkins] *403
Calmette Vaccination: See Tuberculosis immunization, B C G
Children's Bureau, Dr. Martha M. Eliot becomes assistant chief, 1858—E; 1863
Children's Bureau, Miss Katherine F. Lenroot new head, 1958
Children's Fund, annual report, 496
Eskimo, study of, 614
handicapped, survey, Indiana, 1458
health survey, New Jersey, 845
Negro: See Negroes
Poisoning of: See Gasoline; Kerosene; Poisoning
Rheumatic: See Rheumatism
School: See also Heart disease; Whooping Cough vaccination
school, health, Germany, 1246
CHILDREN—Continued
school, malnutrition declines, New York City, 1316
school, number of tooth brushes among, Dresden, 1961
school, subnormal, Tokyo, 1166
Surgery in: See Abdomen
CHILI SAUCE, California Home Brand, 110
CHILL or cold stroke in children, 1163
CHINESE, food of, 625
CHINIOFON: See Amebiasis, treatment
CHIROPODISTS, Mogle (L. R.) guilty of illegal practice, 349
recognition defeated, England, 617
CHIROPRACTORS, defeated, Arizona, California and Oregon, 1242; 1314; 1541—E; 1713
sentenced for producing abortion, Minnesota, 1075
*di*CHLORETHYLSULPHIDE (yellow cross or mustard gas), action on skin, 1867
*tri*CHLORETHYLENE vapor aggravate asthma? 279
CHLORIDES: See also Calcium chloride; Sodium chloride
elimination in acute hepatitis in infants, [Török] 146—ab
elimination in skin disorders, [Zorn] 1265—ab
in spinal fluid in meningitis, [Finkelstein] 791—ab
CHLORINE, acne of exposure to Acoclor-1169, 1089
CHLOROFORM Amnesia: See Anesthesia
hazards in dry cleaning from, 624
Painting with: See Skin disease
Treatment: See Mylasis
CHLORPICRINE gas, toxicity, used as weevil exterminator, 774
CHOCOLATE: See also Beverages; Cocoa
Bowey's Dari-Rich Syrup, 1709
cooking, various brands accepted, 260; 1539; 1855
Hershey Syrup, 918
CHOLECYSTECTOMY: See Gallbladder excision
CHOLECYSTOGRAPHY: See Gallbladder, roentgen study
CHOLERA, "biliveccin" still experimental in, 626
treatment, bacteriophage, [Eaton & Bayne-Jones] *1852
CHOLESTEATOMA, formation, etiologic factors, [Day] 1262—ab
CHOLESTEROL a framework, 24—ab
in Blood: See Blood
in milk constituents, [Ansbacher] 137—ab
metabolism in arthritis, [Hartung] 1884—ab
metabolism in vascular diseases, [Kirchgessner] 721—ab
CHONDRODYSTROPHY, atypical, [Warkany] 445—ab
CHONDROFIBROSARCOMA: See Osteochondrofibrosarcoma
CHORDOMA of cranium and spine, [Hass] 947—ab
CHORDOTOMY: See Spinal Cord
CHOREA, rheumatic disease in children and, [Kaiser] *886
treatment, calcium aspirin, [Mutch] 1104—ab
treatment, phenylethylhydantoin, typhoid vaccine, [Monfort] 291—ab
CHORIO-EPITHELIOMA, Aschheim-Zondek reaction, [Schenck] 148—ab; [Leventhal & Saphir] *668; [Remzi] 1416—ab
extragenital, in a man; Aschheim-Zondek test, [Kantrowitz] 784—ab
CHORIOMENINGITIS, lymphocytic, produced by St. Louis encephalitis virus, [Armstrong] 1103—ab
CHORION: See also Chorio-Epithelioma
cancer after ruptured tubal gestation, [Thomas] 1657—ab
CHOROID PLEXUS, endoscopic coagulation in hydrocephalus, [Putnam] 526—ab
CHRISTMAS Seal: See under Tuberculosis
tree ornaments, dermatitis from, 63
CHROMAFFIN GLANDS, enteric, [Zanardi] 1741—ab
CHROMOSCOPY: See under Stomach function
CHYLOTHORAX, [Grönlund] 456—ab
CIBALGINE, granulopenia after, [Johnson] *1299
CICATRIX: See Intestines, inflammation
CIGARETS: See under Tobacco
CILENTO, R. W., state minister's health forecast for Queensland, 1869
CINCHOPHEN, death due to, 1319
warning, 1787
CINERADIOGRAPHY: See Motion Pictures
CIRRHOSIS: See Liver
CISTERNA MAGNA, malarial therapy, 2043
puncture (suboccipital) during consultation? [Memmesheimer] 1996—ab
CITRATE, Sodium: See Hemorrhage control
CITY Dairy Company Vitamin D Milk, 1623
CIVIL CONSERVATION CORPS Camps: See Camps, C.C.C.
report, 1318
CIVIL WAR Hospital site marked, Richmond, 268
CIVIL WORKS ADMINISTRATION, fees for service, [Spillman] 1010—C
health projects, 764
CLAMS: See Shellfish
CLASMATOCYTE, monocyte relation to, [Wiseman] *1527
CLAUDICATION, intermittent, possible, 700
CLEANING: See Dry Cleaning
CLEFT Palate: See Palate
CLEVELAND Academy: See Academy
Library Association, anniversary, 1242
CLIMATE and health, 683—E; 765
effect on diseases of children, 1163
for parsinusitis, 939
sinusitis and, 1175; 1797
CLINE Ice Cream Co. Vitamin D Milk, 1623
CLINICAL Research, Central Society for, 1717
CLINICS: See also Cancer; Dental; Hair; Ophthalmology; Technicians; etc.
San Diego Central Clinic Service, 923—ME
CLIPS: See Michel clips
CLOVER Creamery Co. Inc. Vitamin D Milk, 1703
CLOVERHILL Pineapple, 1151
CLUB FINGERS: See Fingers
CLUTTON'S JOINTS: See Synovitis
COAL Miners: See Miners
response of peritoneal tissue to, [Miller & others] *910; *911
COARCTATION: See Aorta
COCAINIZATION: See Meckel's Ganglion
COCCIDIOIDES: See Granuloma
COCCYGODYNIA, 57
COCOA: See also Chocolate
Jewel, 1379
Warfield Energized Pure, with vitamin B, 413
COCOBOLO Wood: See Flute
COD LIVER OIL concentrate with viosterol, Squibb Adex Tablets 10-D, 754
effect on pyogenic bacteria, [Löhr] 955—ab
SMACO Carotene and Vitamin D Concentrate in, 341
tax on, England, 269
toxicity, alleged, [Cox] 633—ab
Treatment: See Burns; Osteomyelitis; Rickets; Wounds
Ucoline Cod Liver Oil Concentrate, 1378
CODEINE, addiction liability, [Himmelsbach] *1420
antiphlogistic action, 1398
heterocodeine, effective doses, [Edmunds & others] *1418
COFFEE: See also Caffeine
effect on blood pressure, [Horst] 1986—ab
effect of habitual use on blood pressure, [Horst] 1987—ab
Sanka (caffeine removed), 1623
COITUS, asthmatic attack during, 626
legislation against sex offenses, Irish Free State, 848
COLD: See also Meat, chilled
allergy, [Paul] *24; 996—E; [Sutton] 1325—C; (early references to) [Feinberg] 1725—C; 2048
differential diagnosis of coldness of feet with soreness, 775
Inhalant, 697—BI
Storage: See Food
Stroke: See Chill
urticaria due to, [Sutton] 1325—C
COLDS, common, and the weather, 414—E
electrical potential of skin in relation to, 423
vitamin A (halibut liver oil and viosterol) effect on, [Shibley & Spies] *2021
vitamin A (haliver oil) and, [Gardner] 291—ab
COLLEY, W. B., erysipelas and prodigiosus toxins, Council report, 1067; 1070—E
COLIC: See Kidneys; Umbilicus
COLITIS, Amebic: See Amebiasis
nonspecific, relation to deficiency disorders and anemia, [Hare] 956—ab
syndrome of hypertonic and atonic colopathy, [Kruse] *1366
treatment, apple diet, 1013
treatment, bacteriophage, [MacNeal] 2056—ab
treatment, operative procedure, 1645
ulcerative (nonspecific), serum therapy, [Shwartzman] 2055—ab
COLLAPSE, shock and electrosurgery, [Schörcher] 146—ab
COLLEGE Students: See Students
COLLEGES: See Schools, Medical; University
COLLINS' Plasters, 429—BI
COLLODION: See Impetigo contagiosa
COLOBOMA of upper eyelid, repair, [Peer] 442—ab
COLON: See also Colitis; Pericolic Membrane Syndrome
cancer, [MacGuire] 1989—ab
cicatrizing enteritis involving, [Donchess] 711—ab
distal, parasympathetic nerve supply, [Trumble] 1265—ab
dysfunction, hypertonic and atonic colopathy, [Kruse] *1366
fixation of cecocolon, [Kantor] 632—ab
megacolon, Hirschsprung's disease, 700
roentgen study in amebic dysentery, [Ikeda] 73—ab
COLONIAL Chocolate, 260
COLONIES: See School colonies
COLOPATHY: See Colon dysfunction

COLOR: See also Skin
green food coloring (Burnett), dermatitis from, [Baer] ★10
COLOR BLINDNESS; color sensation mechanism, 1163
COLORIMETER: See Hydrogen Ion Concentration
Test: See Kidney function test
COMA: See Diabetes Mellitus
COMET Brown Rice; Rice Flakes, 1379
Unsweetened Evaporated Milk, 1539
COMMISSIONS: See Rebates
COMMITTEE, A. M. A.: See American Medical Association
on Chronic Illness report, 351
on Economic Security, 1454—E; 1543; 1624—E; 1627
on Research in Dental Medicine, 1241
COMPENSATION of Physicians: See Fees; Workmen's Compensation Acts; under Medicolegal Abstracts at end of letter M
COMPLEMENT: See also Gonorrhea
Fixation Test: See Amebiasis; Arthritis; Gonorrhea; Tuberculosis
of normal persons vs. those with various diseases, [Wendlberger] 1109—ab
CONCATO'S DISEASE, 702
CONFERENCE on Economic Security: See Committee on Economic Security
on Rheumatic Diseases (third), abstract of proceedings, 1732; 1801; 1883
CONFLUENS sinuum: See Torcular Herophili
CONGO RED Test: See Reticulo-Endothelial System
CONGRESS: See also International; Medical Congress; under Societies at end of letter S
of French-Speaking Pediatricians, 1163
of French-Speaking Physicians, 355; 498; 933
of French-Speaking Physiologists, 765
of German Ophthalmologists, 2040
of Ophthalmology of Paris, (47th), 271
of Slavic Dermatologists, Prague, 123
of Socialistic Physicians, Brno, 123
on Colon Bacillus Infections, 2039
on Medical Economics (first), Buenos Aires, 1791
CONGRESS, U. S. Food and Drugs Act appropriations, 2032—E
CONJUNCTIVA, biopsy of normal and pathologic, 271
CONJUNCTIVITIS, chronic, and arsenic, 940
therapy, [Gifford] ★25; [Fridenberg] 430—C; [Hawley] 1375
welder's, 512
CONKLIN, EDWIN G., on progress in study of evolution, 1625—E
CONNECTICUT Society of Psychiatry, formed, 495
CONSCRIPTS: See Soldiers
CONSTIPATION: See also Cathartics; Enema
severe, or Hirschsprung's disease, 700
treatment, effects of bran, 701
CONSTITUTION, effect on development of teeth, 129
CONTRACEPTION; CONTRACEPTIVES: See Birth Control
CONTRACT Practice: See Medicine, contract practice
CONTRACTURE, ischemic, of fingers after arm fractures, [Scherb] 1813—ab
CONTUSIONS, bruises of shin, 1255
CONVALESCENT home, gift for, Toronto, 1958
Serum: See Poliomyelitis
CONVULSIONS: See also Eclampsia; Epilepsy
brain lesions and, 435
in cats, 514
treatment, paraldehyde to control, [Johnson] 219—ab
water balance and, 362
COOK COUNTY Hospital: See Hospitals
COOKING AND EATING UTENSILS: See Aluminum kettle; Enamel ware
COOLEY'S Anemia: See Anemia
COOPER, JAMES, not authorized A. M. A. solicitor, 763
COPPER and iron retention in children, 1154—E
effect on hyperthyroidism, [Meyer] 1030—ab
Ionization: See Leukorrhea
metabolism, and hemochromatosis, [Dry] 375—ab
sulphate in swimming pools to retard marine growth, 1014
tolerance for, in food, Committee on Foods report, 29
Treatment: See under Anemia
CORN Syrup: See Syrup
CORNEA, arcus senilis in colored race, 939
vaccination to demonstrate encephalitis virus, [Rupilius] 302—ab
CORNING Milk and Cream Co. Vitamin D Milk, 1623
CORONERS: See under Medicolegal Abstracts at end of letter M
CORPORA CAVERNOSA of penis, fibrous sclerosis of, 1173
CORPORATIONS: See under Medicolegal Abstracts at end of letter M
CORPUS CALLOSUM, defective development, [Davidoff] 946—ab
CORPUS LUTEUM extract, effect on mammae of infantile guinea-pigs, [Dahl-Iversen] 1032—ab
extract use in hemophilia, 1795
CORSETS, Council on Physical Therapy requirements for advertising, 1946
COSMETICIAN'S claims unwarranted, Minnesota, 1784
COSMETICS: See also Beauticians; Eyelash dye
liquid face powder, 861
poisons in, [Aikman] ★641
COTTON Spinners: See Cancer, industrial
COTTONSEED allergy, [Taub] ★334
COUGH Plate Method: See Whooping Cough diagnosis
tobacco, in cigaret smokers, 626
treatment, gold tribromide, 282; 1797
COURTS and milk supply, 1072—E
social workers stationed in, New York City, 418
special eugenics, Berlin, 849
COUTARD'S Method: See Larynx, cancer
Technic: See Roentgenotherapy
COUTO, MIGUEL, death, 692
COWS, Carrier: See Undulant Fever
Horn: See Fractures, treatment
Milk: See Milk
Tuberculous: See Tuberculosis, bovine
CRAFTSMAN Baker's Flour, 261
CRAMPS, heat (stoker's), treatment, [Fantus] ★990
leg, 434
muscle, during sleep, 512; 1015; (calcium gluconate for) [Steven] 1475
muscle spasm and, 624
CRANIUM, chordomas, [Hass] 947—ab
is there a labyrinthine concussion? 1721
premature osseous union of skull sutures, 2046
trauma to, and ophthalmic inflammation, 1972
CREAM, sensitivity to, 360
CREATINE and cardiac muscles, 115—E
metabolism in myopathies after amino-acid therapy, [Beard] 1980—ab
CREATININE in Spinal Fluid: See Cerebrospinal Fluid
metabolism in myopathies after amino-acid therapy, [Beard] 1980—ab
CREATINURIA: See Urine
CREDE'S Method: See Placenta expulsion; Silver nitrate
CREDIT, bureau established, Peoria City Medical Society, 1314
bureau formed, Winona County, Minn., 1075
Department of Medical and Dental Business Bureau, Indianapolis, 495
CREEPING ERUPTION, larvae in human skin, 1878
CREMATION in Australia, 1869
CREME CREDE, 205—BI
*triortho***CRESYL PHOSPHATE** and polyneuritis, [Smith] 2045—C
CRETULESCU, history of Rumanian Faculty of Medicine, 1635
CREZOIN Balsam Formula No. 1, 429—BI
CRIME: See also under Medicolegal Abstracts at end of letter M
scientific detection, Metropolitan Police College, 1959
CRIMINALITY in twins, 1080
CRIMINALS: See also Prisoners
handwriting, 684—E
CRIMINOLOGY, institute of, Leyden, 502
CRIPPLES, incidence, Germany, 2041
CROSSE & Blackwell Tomato Juice, 755
CRYPTOCOCCUS hominis, fungi of blastomycosis and coccidioidal granuloma, [Benham] 1265—ab
CRYPTORCHIDISM: See Testicles, undescended
CRYSTALLINE LENS: See Lens, Crystalline
CULTS: See Chiropractors; Naturopaths
CULTURE: See under Bacillus; Diphtheria bacillus; Gonococcus; Plague bacillus; etc.
CURARE: See Tetanus, treatment
CURIE, Madame, (death) 118; 690; (tree memorial) 1629; (achievements) 1633
CURRENTS, High Frequency: See Diathermy
CURRICULUM: See Education, Medical
CURTISS Milk Nut Loaf, 1379
CUTEX nail white, possible sensitization to, 126
CYANIDE asphyxia, [Henderson] ★836
gas poisoning from fumigating adjoining apartment, psychosis of, 858
CYCLOMASTOPATHY: See Breast tumors
CYCLOPROPANE Anesthesia: See Anesthesia
CYST: See Ovary; Sebaceous Glands
Branchial: See Fistula, branchial
Hydatid: See Brain; Liver; Lungs
Pilonidal: See Pilonidal Sinus
CYSTADENOMA, of ovary, 763
CYSTEINE and tendency to hemorrhage in obstructive jaundice, 994—E
CYSTITIS: See Bladder inflammation
CYSTOCELE, vaginal fibroma resembling, [Mattson] ★409
CYSTODIAPHANOSCOPY: See Bladder
CYSTOGRAPHY: See Bladder, roentgen study
CYTOPLASM, antibodies, 922—E

D

DAIRY Laboratories Vitamin D Milk, 919
DAMAGES: See Malpractice
DAVILA, CAROL, 1635
DAVIS Inhalator, 1946
DAWN Fresh Mushrooms, 1539
DEAD BODY: See Cadavers; Medicolegal Abstracts at end of letter M
DEAFNESS: See also Hearing; Otosclerosis
caused by pneumatic drills, 929
hereditary, eugenics in relation to, Germany, 850
DEAFNESS—Continued
simulated, diagnosis, voice imitation in, [Baldenweck] 718—ab
total, study of, Bucharest, 2043
DEATH: See also Cremation; Murder; Suicide; list of Deaths at end of letter D
apparent, electrocardiographic control; resuscitation, [Bruns] 1186—ab
Cause of: See also Pneumonia; Syphilis
cause of, after acute portal vein obstruction, [Elman] 294—ab
cause of, weather plays a part in, 1391
caused by drowning? 209
in early morning hours, 272
muscle twitching after, 1644
semen ejaculation after, [Lefkowitz] 1878
sudden, after injecting human serum: autoanaphylaxis, iso-anaphylaxis, 192—E; (reply) [Sokol] 622—C
sudden, anesthetic, and carotid sinus, [Downs] 711—ab
sudden, predictability in arteriosclerotic heart disease, [Viko] ★557
Thymic: See Lymphatism
DECAMETHYLENE Diguanidine: See Diabetes Mellitus, treatment
DEFICIENCY DISEASE, 1036—ab
colitis (nonspecific) in relation to, [Hare] 950—ab
gastro-intestinal tract rôle in conditioning, [Strauss] ★1
DEFORMITIES: See Face
DEGLUTITION: See Swallowing
DEGREES, abolished in advertisements, Japan, 1553
DELIVERY: See Labor
DEMENTIA PARALYTICA: See Paralysis, General, of insane
DEMENTIA PRAECOX, action of glycine in schizophrenics, [Reid] 529—ab
effect of dinitrophenol on metabolism in schizophrenia, [Looney] 296—ab
heat production and control in schizophrenic reaction, [Cameron] 1653—ab
phytotoxic index in schizophrenic [Freeman] 1485—ab
sensitivity to suprarenal cortex glycerin extract in schizophrenia, [Freeman] 1568—ab
social significance of schizophrenia, 56
treatment, short wave, of brain in, [Horn] 1031—ab
treatment, sulphur-gold induced fever, [Claude] 952—ab
DEMIANOFF'S sign in low back conditions, 1875
DENGUE FEVER, in Alabama, 761; 1073
in Florida, 417; (mosquito eradication), 685; 1544
DENTAL aid, national scheme, England, 1319
Caries: See Teeth
clinics, Prague, 123
Hygiene: See Tooth brushes
library presentation of L. Ashley Faught, 1862
medicine, committee on research in, 1241
Practice Acts: See under Medicolegal Abstracts at end of letter M
survey, Illinois, 1628
DEPRESSION, Anesthetic: See Anesthesia
Mental: See also Insanity, manic depressive; Melancholia
mental, and narcissism, 1173
treatment, autohemotherapy, [Glehm] 453—ab
DeRIVAS Treatment: See Dysentery
DERMATITIS: See also Eczema
actinic, and hydroa estivale, [Anderson & Ayres] ★1283
allergic, specific diagnosis and treatment, [Coca] ★1275
atrophicans lipoides diabetica (Oppenheim), [Michelson & Laymon] ★163
Drug: See Arsphenamine
dysmenorrheica symmetrica of Matzenauer and Polland, 207
exfoliative, in industry, 1012
factitia, differential diagnosis, 207
from "angel hair" Christmas tree ornaments, 63
from applying Godfrey's hair dye, [Rattner] ★180
from formaldehyde, 433
from green food coloring [Baer] ★10
from permanent wave solution, [Rattner] ★180
from ragweed, [Brunsting & Anderson] ★1285
from sodium fluoride, 280
from treating cows infected with Brucella abortus, 774
from water softeners, 281
from weeding potatoes, 1397
in glass wool industry, 1644
in silk industry, 939
Mycotic: See Mycosis
of eyelids, 1877
Seborrheic: See Seborrhea
DERMATOLOGISTS, need deeper knowledge of allergy, [Mitchell] 1556—C
Slavic, Congress of, Prague, 123
DERMATOLOGY, American Board of, (examinations) 269; 1317; (diplomates), [Lane] ★541
International Congress on, A.M.A. representatives at, 40

DERMATOLOGY—Continued
postgraduate training, certification of specialists, [Lane] *541
sensitization tests in, [Mendelsohn] 372—ab
treatment, borderline ray, [Dorne] 524—ab
DERMATOSIS: See Skin disease
DESOXYMORPHINES [Edmunds & others] *1418
DEUTSCHE Gesellschaft für innere Medizin, 121
Pathologische Gesellschaft, 850
Röntgengesellschaft, 271
DEUTSCHER Verein für Psychiatrie, 1164
DEXTRI-MALTOSE, Mead's, with Vitamin B, 266
DEXTROSE, absorption from rectum, 1327
Ampoules Dextrose (d-Glucose), (Lakeside), 754
Ampoules Glucose (Dextrose U. S. P.) Lilly, 412
dosage, 703
effect in oxygen deficiency, [Elias] 1340—ab
formers, special purpose foods for diets restricted in, Committee on Foods General Decision, 681
grape sugar and morphine hyperglycemia, [Maeda] 75—ab
injection (Intravenous): See Asthma
Solution Dextrose U. S. P. (Cutter), dosage forms accepted, 1309
solution in half-size vacoliter containers (N. N. R.), 917
solution, preparation; indications for injection, [Hartmann] *1350; *1352
Solution (U. S. S. P.) dosage forms accepted, 491
Tolerance: See also Sugar tolerance
tolerance and renal function, [Bjering] 149—ab
tolerance test, one-hour two-dose, [Exton] 1405—ab
DIABETES, BRONZE: See Hemochromatosis
DIABETES INSIPIDUS in pregnancy, 432
interbrain and, [Gaupp] 793—ab
DIABETES MELLITUS, A. M. A. exhibit on, Atlantic City, 1953
arsphenamine administration in, 273
blood sugar in, effect of exercise on, [Richardson] 1985—ab
blood sugar in, hypoglycemia, [Zeckwer] 1484—ab
blood sugar unstable in [Mauriac] 1106—ab
camp for children, 687
coma, anuria after, hypertonic salt solution relieves, [Root] *482
coma, diagnosis, [Labbé] 1658—ab
complications, arthritis, 1089
complications, cancer, [Marble] 1102—ab
complications, cataract, [O'Brien & others] *892
complications, hyperthyroidism, [Hills] 1486—ab
complications, necrobiosis lipoidica (Urbach); dermatitis atrophicans lipoides (Oppenheim) [Michelson & Laymon] *163
complications, tuberculosis and arteriosclerosis, 1560
complications, tuberculosis, artificial pneumothorax in, [Wiener] 1022—ab
etiology, ovarian hypofunction, [Arias Vallejo] 146—ab
exercise and, [Collazo] 77—ab; [Soskin & others] *1767; [Richardson] 1985—ab
gangrene of face and ear involving fifth and seventh nerve, [Brier] *1704
heart in, [Klingenberg] 1032—ab
heredity, [White & others] *105
heredity; descendants of patients, [Edelmann] 1816—ab
in Germany, central for detecting, 767
in Jews, 1246
in U. S. in 1933, 763
in young boys, 508
insulin in blood demonstrated by transfusion, [Boller] 1187—ab
insulin in children, glycemia unstable, [Mauriac] 1106—ab
insulin indicated before heavy meal? 1015
muscular chemism in, [Marañón] 451—ab
nostrum, Diano for Diabetes, 265—BI
nostrum, German Fruit Salts, 1325—BI
nostrum, Kelpe'Koe, 1639—BI
patients (indigent), dining room for, 1392
sugar tolerance in siblings of juvenile patients, [Mackler & Bischer] *240
thyroidectomy in, 1238—E
treatment, decamethylene diguanidine (synthaline) in, [Campbell] 714—ab
treatment, diet, 272
treatment, diet, Cellu Juice-Pak products, 189; 341; 564; 755
treatment, diet, Committee on Foods General Decision on special purpose foods, 681
treatment, diet, Proteo Bread, 992
treatment, honey in, 861
treatment, methylene blue, [Gabrielli] 222—ab
treatment, muscular exercise, [Soskin & others] *1767
treatment of underprivileged patient, [Howden] 288—ab
treatment, rational, and physiologic essence, [Boldyreff] 1481—ab
treatment, splenic extracts, [Rathery] 791—ab
treatment, Trypsogen-Carnrick, 1782—E
DIABETES, RENAL, diet in, 1643
DIAGNOSIS: See also under names of specific disease
case histories and emotional factors, 1204—ab
case records and self education, 1419—ab
differential, rare but clinically important conditions, [Linnell] 1105—ab
judicious blending of science and art, 1060—ab
laboratory data and unaided senses, 892—ab
DIAL-URETHANE: See Anesthesia
DIALYSIS: See Peritoneum
DIAMOND Crystal Iodized Shaker Salt, 29
Head Brand Pineapple, 1069
DIANO for Diabetes, 265—BI
DIAPHANOSCOPY: See Bladder
DIAPHRAGM, anatomic changes after phrenicectomy, [Stanbury] 215—ab
paralysis (spinal hemilateral), [Bardenhofer] 1496—ab
DIARRHEA: See also Dysentery
treatment, apple and banana diet, [Baumann] 1818—ab
treatment, apple diet, [Fasold] 534—ab; (in infants) 1013
DIASTASE in Spinal Fluid: See Cerebrospinal Fluid
DIATHERMY: See also Short Waves
bone regeneration and, [Weinberg] 294—ab
effect on blood perfusion of brain, [Frey] 1815—ab
effect of using for 1,000 hours, 701
scissors for ablation of gallbladder wall and simultaneous hemostasis, [Thorek] *172
sterilization by coagulation of uterine cornu, [Hyams] 783—ab
surgical, high frequency currents in performing biopsies, [Guequierre & Weidman] *1693
Treatment: See Arthritis; Blood Pressure, high; Hydrocephalus; Retina detachments; Uterus cervix
DIATHESIS, hemorrhagic, constitutional and hereditary, 273
DIBUTYL PHTHALATE: See *di* Butyl phthalate
DICHLORETHYLSULPHIDE: See *di*Chlorethylsulphide
DICK Test: See Scarlet Fever
DICKSON'S Compound for Kidneys and Bladder, 429—BI
DICTAPHONE and competitive examinations for Commonships, France, 849
DIENCEPHALON, median, anatomy of, 930
DIET: See also Food; Infants, feeding; Nutrition; Vitamins; etc.
Apple: See Colitis; Diarrhea
Banana: See Diarrhea; Obesity
effect on calcium and phosphorus metabolism in dogs, 1857—E
effect on teeth, (growth) 129; (disease) 1162
Fads: See Food
Fat in: See Fat
Jarotski: See Peptic Ulcer, treatment
Ketogenic: See Asthma; Pyuria; Urinary Tract infections
"light," 1790
of donor cause of transfusion reactions, [Price] 1571—ab
of French people and local diseases, 930
Protein in: See Protein
rational advice, 190—E
Sippy: See Peptic Ulcer
Smithies: See Peptic Ulcer, treatment
sweets in, Committee on Foods General Decision, 110
Therapeutic: See Colitis; Diabetes Mellitus; Diabetes, Renal; Diarrhea; Obesity; Psoriasis; etc.
Vegetarian: See Vegetables
DIETHYLENE OXIDE: See *di*Ethylene Oxide
DIGESTION, gastric, of proteins vs. carbohydrates, [Rehfuss] *1600
of meat, 1255
rôle in conditioning deficiency disease, [Strauss] *91
DIGITALIS, deterioration, 1475
tolerance, effect of cardiac infarct, [Bellet] 1652—ab
Treatment: See Heart insufficiency
DILATORS, Hegar's: See Uterus cervix
Vestvold's Photo-Electric Dilator, 992
DILAUDID: See also under Anesthesia
addiction, [Stroud] *1422; 1463
effects on basal metabolism, etc., [David] *474
Rectal Suppositories, 1756
use in pain in cancer, [Stroud] *1421
DINITROPHENOL, [Tainter] 138—ab
agranulocytic angina after Nitraphen, [Bohn] *2249
agranulocytic angina from, [Fitz-Hugh] 1099—ab
agranulocytosis with fatal outcome, [Silver] *1058
blood cholesterol and increased metabolism from, [Cutting] 525—ab
circulatory effects, [Stockton & Cutting] *912; [Freeman] 1102—ab
dangers of application, [de Chatel] 1577—ab
effect on blood cholesterol in men of normal weight, [Grant] 1888—ab
effect on metabolism in schizophrenia, [Looney] 296—ab
external heat and, [Cope & Coombs] 60—C
in obesity, 1950—E
DINITROPHENOL—Continued
neutropenia after, pentnucleotide and leukocyte cream improves, [Davidson & Shapiro] *480
poisoning causing jaundice, [Sidel] *254
sale barred, Canada, 1243
sale restricted, California, 924
sensitivity to, be determined by skin tests? [Matzgen] *253
use, 1644
weight reduction and, 697
DIODRAST: See also Kidney function test
N. N. R., 109
DIONNE quintuplets, [Dafoe] *673; 684—E; 1398
DIOTHANE, N.N.R., 1777
DIOXAN: See *di*Ethylene Oxide
DIOXIDE: See Sulphur
DIPHENYLENE Oxide: See *di*Phenylene
DIPHTHERIA, antitoxin administration, way to tell whether child had the disease? 1397
bacilli, action of saliva, [Dold] 454—ab
bacilli, rapid culture, [Solé] 305—ab
immunity, no serum or vaccine will give life immunity, 1795
Immunization: See also Immunization, simultaneous
immunization, [Pöch] 1340—ab
immunization against scarlet fever and, with combined toxoid, [Tsen] 530—ab
immunization, Baltimore, 762
immunization campaign, New York, 1629
immunization campaign, San Francisco, 417
immunization campaign, Toledo, 1000
immunization, latent and artificial, 1311—E
immunization, Löwenstein's ointment, [Siegl] 1109—ab
immunization, survey, Pennsylvania, 117
immunization, toxoid (alum), one dose in, [Walker] *227; [Keller & Leathers] *478
immunization, toxoid (Ramon), 504; 620
immunization, toxoid replaces toxin-antitoxin, West Virginia, 927
in silk mill workers, Japan, 769
malignant, 1247
malignant, anaerobic strains of diphtheric bacilli in, [Kollath] 1896—ab
problem of latent infection in, 1951—E
Schick Test, simplification, [Reh] 145—ab
tabetiform symptoms after, [Werner] 1996—ab
Toxin for the Schick Test, Diluted with Peptone Solution and Ready for Use (Merrell) 1947
toxin-antitoxin, state stops distribution, New York, 195
Toxoid: See also Diphtheria immunization
toxoid, alum precipitated, 280
Toxoid, Alum Precipitated (Refined)-Lilly, 1947
Toxoid, Alum Precipitated (Refined) (Merrell), 1947
toxoid, Alum Precipitated (Refined), P. D. & Co., 1378
Toxoid, Alum Precipitated, Refined (U. S. S. P.) 754
Toxoid (Merrell), 1947
toxoid, Refined Diphtheria Toxoid Alum Precipitated-Squibb, 917
trend in childhood, 682—E
DIPHTHEROIDS, streptococci that resemble, in subacute endocarditis, [Ferguson] 1487—ab
DIPLOMATES: See American Board of Dermatology
DIRECTORY: See American Medical Directory
DIROFILARIA immitis, heart worms, 1728
DIRT: See Dust; Filth
DISABILITY, functional, estimation in pulmonary fibroses, [McCann & others] *810
DISEASE: See also Death; Diagnosis; Epidemics; Vital Statistics; etc.; under Medicolegal Abstracts at end of letter M
as mental stimulus, 1455—E
Carriers: See Pneumococcus; Scarlet Fever; Typhoid; Undulant Fever; etc.
Committee on Chronic Illness, report, 351
in relation to weather, 200
DISLOCATION: See Hip Joint; Shoulder; Wrist; etc.
DISSECTION, preparation of cadavers for, 1646
DIURESIS, action of liver in, [Villaret] 1812—ab
DIURETICS: See Mercury; Theobromine
DIVERTICULUM: See Duodenum; Intestines
DIZZINESS: See Vertigo
DOCTOR: See Dr.; Physicians
DODDS Vitamin D Milk, 1151
DOGS, leishmaniosis in Madrid and infantile kala-azar, 1392
rabies incubation period in, 208; 436
rabies transmitted by vaccinated dogs? 282
streptococcus immunity in, 1877
DOISY-Allen Test: See Allen-Doisy Test
DOLE Pineapple, 1069
DOMRICH Scrotal Ring: See Scrotum
DONOVAN'S Solution: See Verruca
DOPA reaction, cevitamic acid effect on, [Grüneberg] 1660—ab
DORN-Sugarman Test: See Sex
DOSAGE: See Dextrose; Graafian Follicle hormone; Radium; etc.
DOT Strained Products, 111
DOWELL Test: See Pregnancy, diagnosis
DOWNING Bros. Vitamin D Milk, 1623

DR. Gardner's Kidneyaid, 1084—BI
P. Phillips Tree Ripening Oranges, Tangerines and Grapefruit, 839
shoe companies stop using "Dr.," 1001
DRAINAGE: See Bile Ducts; Bladder; Cerebrospinal Fluid; Gallbladder; Sinuses, Nasal
DRESSINGS, zipper bandages, [Pratt] *983
DREYER, GEORGES, death, 102
DRIGGS Dairy's Vitamin D Milk, 1151
DRILL Channels: See Osteomyelitis
pneumatic, deafness from, 929
DRIP, Intravenous: See Injections
DROPSY: See also Ascites; Edema
epidemic, and primary glaucoma, [Kirwan] 868—ab; 959—ab
DROUGHT, prolonged, shortage of water from, England, 500
DROWNING: body dead before being thrown in water? 209
DRUGS: See also Formulary; Pharmacologists; Pharmacopeia
Addiction: See Barbital; Codeine; Dilaudid; Morphine; Opium
effect on respiratory exchange, [Laggé] 718—ab
Eruption: See also Arsphenamine; Quinine
eruption (fixed), differential diagnosis, 207
eruptions, [Wise] 1489—ab
idiosyncrasy and agranulocytic angina, [Fitz-Hugh] 1099—ab
rules on use of, not on sale to public, Italy, 273
sensitize skin to sunlight, [Anderson & Ayres] *1282
Traffic: See Narcotics
DRY CLEANING, danger of using gasoline, 1003
industrial hazards from chloroform and orolnite, 624
industrial hazards in hat cleaning, 1013
DRYER, electric air blower, [Burton] *338
DU BARRY'S Food, 111
DUCK Eggs: See Eggs
DUNHAM, W. C., sells fraudulent Warm Springs crystals, 1631
DUODENAL TUBE: See Lambliasis
DUODENUM: See also Periduodenitis
diverticulum and pancreatitis, [Frentzel-Beyme] 1816—ab
Fistula: See Fistula
stasis, chronic intermittent, [Friedenwald] 1021—ab
Ulcer: See Peptic Ulcer
unstable or irritable, [Friedenwald & Feldman] *2007
DUOTAL Tablets, 917
DUST: See also Bakelite; Castor Bean; Filth; Insect
protection against, 1543—E
regulations for dusty trades, England, 1244
response of peritoneal tissue to, [Miller & others] *907
DUTCH East Indies, European population in, 425
DUTY: See Insulin
DWARFISM, endocrine, antuitrin G plus thyroid extract for, [Engelbach & Schaefer] *464
renal, pathogenesis, [Loeschke] 721—ab
DYES: See Aniline; Brilliant Blue
Eyelash: See Eyelash
DYNAMICS: See Cerebrospinal Fluid
DYSENTERY: See also Diarrhea
Amebic: See Amebiasis
bacillary, bacteriophage in, [Feemster] 1487—ab; [Eaton & Bayne-Jones] *1851
bacillary (Flexner atypical), Jersey City epidemic, 418; [Felsen & others] *1055
bacillary, late sequels after, [Ohly] 302—ab
Bacillus pseudocarolinus, [Chopra] 299—ab
bilivaccin still experimental in, 626
in infants, cardiac disorders, [von Kiss] 1413—ab
in infants, etiology, [Terell] 146—ab
McCoy (Frank), dietary quack discusses, 347—E
Sonne, [Felsen & Osofsky] *966
toxin (Shiga), sodium thiocyanate protects against, [Reid] 871—ab
treatment, De Rivas, [Hemenway] 306—ab
DYSGERMINOMA, ovarian, [Kleine] 1815—ab
DYSMENORRHEA, 512
DYSPNEA, [Meakins] *1442
length of life from onset of, [Viko] *554
DYSTHYMIA: See Thymus
DYSTROPHY: See also Chondrodystrophy
adiposogenital, treatment, [Rachmann] 80—ab
brevicollis, congenital, [Thaysen] 1744—ab
muscular, amino-acid therapy (glycine; glutamic acid), [Tripoli & others] *1595
muscular, gelatin for, [Stone] 1264—ab
muscular, glycine for, 1236—E; [Kostakow] 1266—ab
muscular (progressive pseudohypertrophic), pilocarpine and epinephrine injection for, [Lutz] 1489—ab

DEATHS

A

Abaly, William Constantine, 1638
Acheson, Alexander W., 1167
Adair, Samuel L., Jr., 854
Adams, Flora, 1468
Adams, George Thomas Cooke, 368
Adkins, James M., 204
Aikman, William H., 621
Ainsworth, Frederick C., 124
Alderson, Arthur Seymour, 1468
Alexander, Frank Sherman, 854
Alford, Edward True, 1393
Allan, Hugh Walden, 1394
Allen, Joseph Wright, 1793
Allen, Paul Edward, 934
Allen, Thomas Herbert, 1468
Allen, Walter Brainard, 1009
Allen, Walter Owen, 1393
Allison, Otis Wood, 1638
Almes, Herman Eckhart, 1468
Alton, Robert A., 696
Alyea, Thomas E., 428
Ames, Albro Joseph, 2045
Amiss, James M., 1251
Amos, Chester Allen, 274
Andersen, Louis Nels, 1249
Anderson, Henry Watkins, 1394
Anderson, James Henry, 1555
Andrews, George C., 1324
Archambault, Joseph A., 771
Archer, Ernest Elmo, 1323
Arensberg, Louis Frederick, 1638
Armstrong, Rezin L., Jr., 1965
Arnold, Daniel Grady, 1872
Arnold, Elwood Eugene, 1469
Asher, Harvey Combs, 854
Ashford, Bailey Kelly, 1467
Ashley, Emmet L., 1965
Ashmore, Frank, 59
Aspey, Lewis Sutton, 1469
Atwater, Caleb Huntington, 1638
Auer, Ulysses Grant, 203
Austin, Charles Lee, 59
Austin, Wilford J., 427

B

Baines, William Tally, 1324
Baird, Alvin Walter, 1871
Baird, Thomas H., 1723
Bakeman, Francis Albert, 696
Baker, Archibald E., 770
Baker, Harley N., 1168
Baker, Robert Howell, 1324
Baldridge, Clarence William, 1871
Baldwin, Aaron P., 1250
Baldwin, Floyd McKennan, 934
Ballard, L. Anna, 935
Bandy, William L., 1469
Banks, Clark Watson, 1168
Barnard, David Luther, 59
Barnes, Irving Ferguson, 1082
Barnes, John Robert, 1324
Barnes, Leroy S., 204
Barnes, Walter R., 622
Barnhart, Don A., 1469
Barnwell, James F., 771
Barr, Cyrus H., 696
Barr, Henry Allen, 696
Barrett, Park Mitchell, 1871
Barrett, Patrick Joseph, 771
Barrett, Wesley Johnson, 1167
Bartlett, Henry Graham, 934
Bass, George Wilson, 1250
Batson, David Christian, 275
Bauer, Milton Monroe, 58
Baumgarten, William, 1394
Baumoehl, Benjamin, 275
Bayon, Henry, 59
Bean, Leonard B., 1469
Beane, Newell Wesley, 854
Beardsley, Benjamin Franklin, 59
Beattie, Walter Edward, 59
Beazley, Wyatt Sanford, 59
Beck, George Russell, 854
Beemer, Nelson Henry, 1637
Belknap, Frederick W., 506
Bell, Arthur C., 204
Bell, Charles Deems, 771
Bell, Harry Dudley, 1324
Bell, Harry Lee, 1250
Bell, Leo Pecci, 2044
Bellack, Bernhard F., 2045
Bellows, Howard Perry, 1554
Benedict, Erle Edson, 772
Bentley, David Fuller, 621
Bernard, Leon, 1320, 1396
Bertrand, William T., 1965
Bibb, Merwyn R., 1723
Bibby, Elias, 622
Bickel, Robert John, 1872
Bicking, Clarence Austin, 1965
Bicknell, Ralph William, 854
Biddle, Philip George, 621
Biedert, Charles Christian, 695
Binder, Joseph, 1964
Birdsall, Thomas P., 1083
Black, James Daniel Marion, 771
Blackburn, Edward Walker, 1793
Blackhall, Alfred Forbes, 1554
Blackman, Julian Raymond, 1793
Blackwell, Finley D., 125
Blair, Benjamin H., 853
Blake, David Cunningham, 359
Blake, Grover Cleveland, 1008
Blakeney, Simeon, 1723
Blakney, Simon: See Blakeney Simeon
Blanck, Ernest C., 1555
Bland, George Harper, 854
Blanks, John Harrison, 696
Blanton, Atticus Gwynn, 772
Bliss, Charles Curtis, 935
Bliss, Malcolm A., 1082
Bloodgood, Charles, 1250
Bluestone, Joseph Isaac, 1638
Bly, Boyd Cline, 1323
Bobbitt, Emmett H., 1324
Bocken, Herman, 275
Bodey, George W., 1793
Bogart, Belmont De Forest, 1249
Bogart, William Moore, 58
Boger, John Albert, 1554
Boggess, Walter Fisk, 621
Bolling, William Archibald, 1723
Bond, John B., 1082
Bond, Thomas J., 1723
Boody, Frederick Joseph, 1872
Bookwalter, Carl Ferdinand, 934
Booth, Alexander Nelson, 1323
Booth, Archibald A., 1469
Booth, H. Allen, 772
Boquist, Harold Samuel, 358
Borden, William Cline, 934
Borgelt, Isaac B., 1555
Borts, Mathias, 772
Bourland, Othello Morino, 621
Bowen, Alfred Preston, 1083
Bowers, George R., 1469
Bowman, David Edward, 275
Boyd, Earl Eugene, 1965
Boyd, Willis Guy, 771
Bracker, Max Henry, 1009
Bradford, Cary Carpenter, 2045
Bradley, Thomas P., 1168
Braidwood, Charles M., 1555
Branham, Joseph Henry, 1082
Brantly, Augustus H., 854
Bray, Felix Jasper, 1250
Breck, Theodore, 125
Brenizer, Nelson O., 1168
Brennan, Francis Eugene, 771
Brittin, Ernest Herbert, 854
Broad, Henry A., 1009
Broadstreet, Samuel C., 1554
Broghammer, Francis Joseph, 124
Bromley, Richard Calvin, 1469
Bronfin, Isador David, 621
Brooks, Hyram G., 1009
Brooks, John Marvin, 696
Brown, Chauncey Fairfield, 1323
Brown, Damon Alonzo, 621
Brown, Herbert Clift, 1638
Brown, James Spencer, 853
Brown, Joseph Eugene, 59
Brown, Leonidas T., 622
Brown, V. J., Sr., 204
Brownlee, Milne, 2045
Bruner, James M. O., 854
Brunson, Eugene Eliel, 854
Bryan, William Minor, 1555
Bryant, Charles Greenberry, 1871
Bryant, Gershon Campbell, 771
Bryant, William C., 1469
Bryson, Lewis M., 1324
Buchanan, Gerald Marvin, 1393
Buchanan, Henrietta A., 275
Buchanan, John W., 1965
Buck, Burton B., 771
Bull, Heman Rowlee, 771
Bullard, Julius Arthur, 125
Bulloch, Joseph Gaston Baillie, 696
Bumsted, Clarence Van Reynegom, 58
Burdick, George Enos, 1249
Burgess, Arthur Joseph, 1723
Burgess, Henry Clinton, 1722
Burke, Charles Le Roy, 696
Burke, Ellsworth Martin, 125
Burkhead, James Hodgen, 125
Burleson, Louis N., 696
Burnap, Henry Thompson, 622
Burnett, George W., 505
Bush, Charles F., 1324
Butler, James Enos, 1009
Butler, Thomas Bernard, 1167
Buttemiller, John C., 204
Butters, Thomas Lowell, 1168
Butts, J. Baptist, 622

C

Calder, Margaret Cowan, 772
Calhoun, Chambers D., 506
Calisch, Alexander Charles, 1723
Callanan, William Cornelius, 1965
Campbell, Amos Wright, 772
Campbell, Charles Foster, 1323
Campbell, George Perry, 1468
Campbell, William Alexander, 1872
Campbell, William Scott, 1792
Campbell, William T., 854
Cantacuzino, Jean, 424
Carlucci, Francesco, 1469
Carmack, John Walter, 1870
Carmany, Harry Stober, 621
Carnett, John Berton, 621
Carpenter, Eugene R., 1554
Carpenter, Willard Bryant, 1324
Carr, Leeming, 58
Carriere, Theodore L., 506
Carson, Julian C., 1324
Carter, Charles H., 1723
Carter, Franklin Francis, 358
Cartier, Antoine Paul, 1249
Cary, Herbert Elwood, 59
Case, William W., 1723
Casey, Herbert William, 203
Casey, William Alden, 358
Castleman, Howell Lea, 2044
Castles, Thomas Ralph, 771
Cather, Ernest J., 58
Causey, Thomas William, 1469
Chambers, Alton Fiswellen, 1167
Chambers, John Wilbur, 1872
Charles, Havelock, 1461
Charlton, Callie B., 622
Cheatham, Goode, 853
Chester, Thomas Weston, 1082
Cheval, Aguilas, 1965
Chisman, Eudora Pierce Higgins, 1167
Chitwood, Oren A., 2045
Choquette, J. A. Emile, 771
Christle, Jean Beatrice, 853
Christie, William Edgar, 771
Christopher, David Irvine, 1468
Clark, Henry Seymour, 1965
Clark, James A., 1793
Clark, John Edward, 1467
Clark, Jonathon Evans, 125
Clark, William Alexander, 1323
Clay, William Perry, 1723
Claypool, Joseph S., 1965
Clegg, Thomas Boykin, 771
Clements, James Wilson, 125
Clendenan, Charles Wellington, 1965
Cleveland, Woodbury F., 1324
Clute, William Francis, 1965
Clutter, Bradford Frankfort, 621
Clymer, Henry Vance, 1965
Coakley, Cornelius Godfrey, 1870
Coblelgh, Clarence Augustus, 506
Cochran, Francis James Albro, 2045
Cochran, John Alexander, 1637
Coe, Samuel S., 1008
Coey, Andrew J., 428
Coffman, Harry Franklin, 1468
Cole, Archie, 506
Colgin, Merchant W., 853
Coll, James Patrick, 1250
Collenburg, John Henry, 1872
Collier, George Benjamin, 427
Collins, Alonzo K., 1872
Collins, Michael Timothy, 771
Collum, Oscar Frederick, 1872
Comas, Philip H., 1638
Comer, John J., 428
Congdon, Willis Rollin, 1555
Connett, George Cramer, 506

Connolly, Edward Worthington, 1323
Connor, John Edward, 1009
Conoly, James Halbert Jr., 2045
Conover, Charles Haight, 506
Conrad, Alexander Holland, 505
Conran, Patrick Joseph William, 506
Conway, Francis Bernard, 1249
Cook, Hamlin Collier, 1009
Cook, Harvey Samuel, 1468
Cook, Norman Randolph, 854
Cooke, William Praytor, 696
Cooksey, Thomas G., 854
Coon, John Williams, 1467
Cooper, William Francis, 58
Core, Jonathan Blythe, 1168
Corey, William McGlasson, 125
Cornell, Stephen Herbert, 1872
Cornwell, Edwin Sylvester, 427
Coulston, Elmer Floyd, 59
Counce, Kince Manly, 204
Couto, Miguel, 692
Cowan, R. H., 1469
Cozad, Francis E., 1872
Craig, Lawrence Rosboro, 853
Creasey, Henry, 1965
Creighton, Ernest Albert, 1468
Cremer, Mathias Hubert, 58
Crewdson, J. W., 1638
Crews, John Walter, 1638
Criswell, David Max, 1723
Crocker, Marc Henry, 1965
Croft, Albert Joseph, 1723
Crofts, John Livingston, 1964
Crosby, Robert, 935
Crosby, Walter Theodore, 1872
Cross, Clara B. Glines, 1965
Cross, John Francis, 935
Crow, Louis M., 506
Crowder, Malcolm M., 204
Crowley, Jeremiah Francis, 621
Cunningham, Charles, Sr., 58
Cunningham, Miles D., 696
Cunningham, Oral De Witt, 1083
Curie, Marie Sklodowska, 118, 1629, 1633
Curlee, James Peyton, 1009
Curran, William Ferris, 1871
Currie, Nolan Ray, 1250
Curtis, Kim Devol, 124
Cutler, Charles Edward, 1009

D

Daigneault, J. Emile, 428
Dailey, Eleanor Stallard, 1250
Dailey, Fielden Straughn, 1965
Dailey, Thomas Joseph, 59
Dales, John Robert, 506
Daley, Oral I., 1872
Danford, Edmund Fremont, 1872
Daniels, Jared Waldo, 1723
Danley, Noah, 203
Danziger, Fred, 1324
Darracott, George F., 1468
Davenport, Albert Brandon, 1638
Davidson, Alexander W., 1469
Davies, Charles Edward, 1965
Davis, Cecil Clair, 1323
Davis, Fellowes, Jr., 1249
Davis, James A., 358
Davis, Joseph William, 1394
Davis, Pinkney Lee, 854
Davis, Robert Hill, 621
Davis, William S., 275
Davis, William Seymour, 1394
Dawson, Byron Francis, 1083
Day, Edward Philip, 1965
Day, Julius B. H., 1324
Dechman, Andrew Arthur, 59
Deem, Samuel P., 772
Delisle, Jean Baptiste, 1555
Denig, Blanche Alpine, 125
Denson, Henry A., 125
De Pree, Peter John, 59
Derrickson, John B., 1871
Dever, John James, 1324
De Vereaux, John Joseph, 1083
Deville, Leon, 934
Devlin, Charles James, 771
DeVore, Fred Fernando, 1793
DeWeese, Cornelius, 1249
Dickinson, Frank Powell, 1965
Dillon, G. Parker, 854
Dimmitt, James Sterling, 428
Dodenhoff, John Ramsey, 203
Dodge, William Temperance, 58
Doherty, Victor Charles, 125
Doray, Louis, 1394
Dorminy, William David, 428
Dorn, Frederick Ehinhart, 275
Dorr, Levi Lewis, 1394
Doty, Alvah Hunt, 58
Dougherty, John Philip, 1249
Douglas, Robert Abraham, 427
Douress, Philip Charles, 934
Doyle, John Whalen, 1168
Drake, Charles Hunter, 934
Drake, Emma Frances Angell, 1872
Drake, George Rufus, 1637
Drennen, Jefferson N., 695
Drewry, William Francis, 1393
Dreyer, Georges, 1002
Duck, Lonzo Abner, 125
Du Comb, James Wilson, 1008
Dudley, George S., 1324
Duerson, Charles B., 59
Dufour, Clarence Ruter, 1249
Duncan, Roscoe C., 1965
Dungan, James Forney, 1394
Dunn, John, 1965
Dunn, Oscar Beesley, 1250
Dunn, Stephen Farrar, 1394
Dutton, Benjamin Blake, 935
Dye, Albert A., 2045
Dye, Daniel Chauncey, 1394

E

Eaddy, Albert Golden, 696
Eadie, Andrew Beattie, 428
Eastman, Newton R., 204
Easton, Charles Daniel, 1468
Eccles, Robert Gibson, 274
Eckles, Warren F., 1083
Eddleman, Hall M., 1324
Eddleman, William Ralph, 1793
Edwards, Frank Hiram, 935
Edwards, Isaac L., 1168
Eidman, Friedrich Gustave, Sr., 1009
Ellenson, Eugene P., 427
Elliott, Charles Coyne, 1394
Ellis, George Curtis, 934
Ellis, Linus M., 1872
Ellison, William A., 1468
Ellsworth, Jeremiah C., 1324
Elmore, Shirley Quincy, 1393
Emanuel, Fannie, 204
Emerson, Joseph Baxter, 934
Enos, Joseph W., 1394
Ensor, Thomas Hayden, 1638
Epstein, Abraham, 622
Escahl, Jose, 621
Escaller, J. M., 1791
Esch, William J., 505
Esdale, William Rupert, 1638
Elkin, Samuel Davenport, 2044
Evans-Lombe, Walter Baylor, 621
Evins, Eugene L., 1555
Eychaner, George Arthur M., 1009
Eyre, Frank, 1083

F

Fancher, Hampton Lansden, 1870
Farley, William F., 1555
Farmer, Joseph A., 204
Farr, Uriah H., 1555
Faucher, Peter V., 935
Fauth, Karl John, 59
Feild, Richard Alexander, 1083
Fein, Alfred L., 622
Feld, Willard Carl Barnes, 1324
Ferguson, James Vance, 427
Ferguson, John Irwin, 358
Ferguson, John Preston, 1555
Fernandez y Nater, Manuel, 1722
Ferron, G. Arthur, 359
Field, Davis L., 1394
Fields, James Leonidus, 203
Finkbiner, Martin Luther, 204
Finley, George William, 506
Finnoff, William Chris, 58
Fischells, Philipp, 1722
Fishberg, Maurice, 934
Fisher, Edward Dix, 1870
Fisher, Irving Jewell, 1468
Fishman, Abraham Pincos, 695
Fisk, Frank F., 771
Fiske, Willard, 125
Fithian, Paul Hays, 125
Fitz, George Wells, 1638
FitzGerald, George Michael, 1009
Fitzpatrick, Thomas V., 695
Flynn, George William, 1250
Fogel, Solon C. B., 1468
Folin, Otto K. O., 1871
Folsom, Ephraim Melvin, 1872
Folsom, Shirley Dan, 934
Foote, Preston Work, 1555
Forshey, Joseph William, 1083
Fortner, Horace Thea, 771
Fortney, Gerhard Olaus, 1723
Foss, Walter B., 125
Fossey, Herbert Leighton, 1469
Foster, Charles Manley, 772
Foster, George B., 1168
Foster, Millard Homer, 695
Foster, Walter J., 1008
Frain, Charles Elias, 1469
Francis, Loftus Harley, 1083
Franklin, A. Leo, 1965
Franklin, Churchill Charles, 934
Franklin, John Henry, 125
Frasier, Alfred Smith, 695
Freeman, Arthur, 1792
Freeman, Arthur B., 1965
Freeman, William Francis, 770
French, Henry Sumner, 934
French, John Harold, 1965
Friduss, Samuel L., 1793
Frost, Charles E., 1009
Fry, Philip Benjamin, 934
Fuchsius, John Hancock, 1082
Fuller, Aubrey Taylor, 1555
Fulton, T. Chalmers, 1469
Furlong, John C., 1468

G

Gaddie, William L., 854
Gaines, Mark Cyrus, 622
Galegari, Giovanni Battista, 1081
Gallagher, John Patrick, 359
Gallardo, Angel, 426
Galloway, James Hervey, 1324
Galloway, Marshall H., 1723
Gamble, Ross Merrill, 59
Gandy, Joseph Edward, 203
Gantt, James Clifton, 622
Gantz, Richard, 1250
Gardner, David Moulton, 1964
Gardner, Harrie Milton, 275
Garrett, John Milton, 1249
Garrett, John Randolph, 1554
Garrison, Harvey W., 1008
Garrison, Richard, 1723
Gassaway, T. B., 1723
Gates, Alfred, 1009
Gatlin, Eugene N., 621
Gau, Henry Frederick, 1723
Gayer, Earl Wayne, 1083
Geer, Charles Carroll, 124
Geist, James Webber, 1324
Genest, Louis Anatole, 359
Genge, Thomas Symes, 1168
Genung, Homer, 1323
Geoffroy, 766
Gerard, Lawrence George, 428
Gerass, Joseph Henry, 1009
Gerhard, Samuel Pilgrim, 1249
Gerichten, George P., 1793
German, Dan, Jr., 428
German, George Oliver, 1250
Gevedon, W. L., 1965
Gibbs, Charles Henry, 1555
Gibson, Orlando G., 125
Gilbert, John, 2044
Gilchrist, George Miller, 1965
Gill, Walter Myers, 1250
Gillette, Philip F., 1722
Gilmore, William N., 1249
Gilpin, Friend Bennett, 1468
Ginn, Robert Benjamin, 505
Girardi, Victor Joseph, 1008
Girvin, Alfred W., 1168
Glahn, Jacob, 506
Glasgow, Marvin Whitfield, 1249
Glassco, Gerald Stinson, 1167
Gleason, Edward Baldwin, 1964
Godbey, Martin Van Buren, 124
Godfrey, George Myers, 1609
Goldberg, Ralph Henry, 1009
Goldstein, Samuel, 203
Good, John Ralph, 428
Goodwin, Andrew W., 505
Gordon, Moses Wolff, 1009
Gosnell, Charles E., 359
Gosnell, John Henry, 1323
Goss, Alice Morgan, 935
Gossage, William Lafayette, 1008
Gould, Harry G., 1723
Gowan, Thomas J., 772
Goyer, Harry Homer, 204
Grable, Elmer Edgar, 1469
Granger, Francis Marion, 1793
Grant, Andrew, 506
Grant, John Henry Young, 506
Grant, Peter Taylor, 427
Grausman, Philip Michael, 1871
Gray, Amos D., 622
Gray, Milton S., 1250
Grebe, Arnold Carl, 1872
Green, Anna Jacobs, 359
Green, Earle Stanley, 1468
Green, Max, 934
Greene, William Thomas, 1638
Gregg, Jacob Ellis, 203
Gregory, Elisha, 621
Grenier, Jean Paul, 1872
Griffies, John Calhoun, 1009
Griffin, William J., 1324
Griffith, Arthur S., 359
Griggs, Stephen Ellud, 359
Gross, Samuel S., 1082
Guilford, Edgar William, 359
Guiteras, Gregorio M., 358
Guittard, Alwin Meigs, 1250
Gustin, Plomer Julius, 203
Gutmann, Benjamin, 1008
Gutsch, Otto John, 1009
Guttery, William David, 1009

H

Haas, George H., 935
Haggart, John, 1871
Hahn, Frederick Anthony, 1324
Hain, Charles Oliver, 695
Halgren, Harry Alfred, 1393
Hall, Harvey Ellsworth, 1394
Hall, John Howard, 695
Hall, William Ethelbert, 506
Hallenberg, Robert Wesley, 854
Hamer, John Allen, 428
Hamersly, William H., 1469
Hamilton, Annie Lee, 1393
Hamilton, James Warren, 1468
Hamilton, William T., 1638
Hammes, Ernest Wolfgang, 1469
Hammond, Nathan, 1723
Hammond, Robert Lee, 1083
Hampton, Zebulin Monroe, 1555
Handley, Max C., 1168
Hankins, William D., 1394
Hansell, Howard F., 1793
Hansen, Henry Peter, 125
Hardwick, Gus A., 1009
Harley, Claude J., 506
Harnisch, Henry J., 1638
Harrell, Charles, 1469
Harris, Benjamin C., 428
Harris, Douglas Nebraska, 1324
Harris, Elijah McCulloch, 1393
Harris, Eugene A., 1792
Harris, John Brown, 1793
Harris, William H., 934
Harris, William H., 1965
Harrison, Arthur Gilbert, 1468
Harrison, Edward Wesley, 772
Harrison, Elmer Ellsworth, 1167
Harrison, Joseph James, Jr., 1468
Harrison, Robert H., 934
Hart, John F.: See Harte, John Francis
Hart, Trusten Mitchell, 854
Hart, William Emilus, 1393
Harte, John Francis, 506
Harter, Allen Jasper, 428
Hartley, Ulysses Eugene, 125
Hartley-Hellyer, Francis William, 428
Harvey, Rufus S., 1168
Harwood, Clarence Hugh, 1083
Haskins, Herbert Charles, 1469
Haslett, James Henry, 1394
Hawk, Edgar Allen, 203
Hawkins, J. E., 1723
Hawkins, James Hanchcer, 1469
Hawkins, J. T., 1168
Hawkins, R. Henry, 59
Haynes, Winston Rives, 204
Hays, Allen T., 1009
Head, John Brodie, 1638
Heading, John Maxwell, 1009
Healy, Daniel Joseph, 1964
Healy, Daniel Laurence, 427
Heath, C. J., 696
Heath, J. Frank, 1083
Heckard, Martin Otis, 2044
Heideman, Christian: See Heidemann, Christian
Heidemann, Christian, 772
Heilman, Ralph Salem, 853
Heliman, William Landis, 1323
Helmark, Jacob H., 427
Hejinian, Aram Garabed, 428
Helgesen, John Martin, 935
Hensley, James M., 935
Hepperlen, Harry Michael, 274
Herman, Ambrose C., 1323
Herr, Harriet, 935
Herrick, Archie W., 1637
Herrin, Herbert Eliot, 621
Herring, Edwin Barney, 1638
Hertzog, Solis-Cohen Bogh, 2044
Heuser, Carlos, 426
Hibbard, James S., 1723
Hice, Edward Houston, 1394
Hick, John Carlos, 1469
Hickey, John Aloysius, 1638
Higginbotham, William L., 935
Higgins, Adelbert Pierce: See Chisman, Eudora Pierce Higgins
Higginson, George, 935
Hill, Arthur R., 1469
Hill, Frank Mulford, 622
Hill, George Allard, 427
Hill, Matthew M., 428
Hill, Warren Brown, 428
Hincher, Charles Lane, 2082
Hinchey, Frank, 934
Hindman, Joseph H., 275
Hinton, Sterling Buchanan, 1722
Hirzel, Walter Christian, 1872
Hobby, Ada Theodosia, 203
Hobson, James David, 1637
Hodges, Almon Danforth, 1723
Hoffman, Olga A., 203
Hoffmier, Lawrence A., 506
Hoggatt, William W., 1965
Hogle, Knut Linnea Mason, 203
Hogue, Rolly Ray, 358
Holbrook, Ralph Waldo, 854
Holden, George Walter, 505
Hollie, Albert O., 1469
Hollinger, Isaac C., 428
Hollis, Starr Clarence, 1555
Holman, Carl John J., 124
Holmes, Thomas Blakeney, 203
Homer, Herman Corwin, 1168
Hon, Amzi Wolfe, 1469
Hooe, Abram Barnes, 1166
Horn, Amandus Max, 696
Horowitz, Simon, 1168
Horr, Albert Winslow, 853
Horr, William H., 606
Horwitt, Solomon, 427
Hotchkiss, Walter Booth, 1637
Howard, Charles Ernest, 934
Howard, Charles James, 1637
Howard, Frank Ernest, 1469
Howard, James A., 1872
Howard, William N., 771
Howell, Joel Jasper, 1324
Howitt, Henry, 1323
Hoyt, Ralph L., 1555

V 19

Thompson, Harry John, 1083
Thompson, Harry Parker, 1554
Thompson, James Henry, 1009
Thompson, John Henry, 58
Thompson, John Melvin, 1009
Thompson, Leroy, 1873
Thompson, Mary Helen, 1324
Thornby, Hallward J., 427
Thornton, Francis Ernest, 1168
Thornton, Lemuel Eugene, 1965
Thum, Ernst, 58
Tilford, Franklin Pierce, 59
Tillotson, Homer John, 1555
Tilson, Jacob Carson, 204
Tilton, Albert Llewellyn, 1469
Timmer, William I., 1793
Tindle, Thomas John Clayton, 359
Titman, Russell Edward, 1167
Titterington, Jesse M., 1555
Tittle, Harry Woodruff, 1871
Toering, Albert John, 59
Tomlinson, Peter W., 853
Tomlinson, William Hains, 1723
Tomory, D. M., 853
Topping, Moses Hawkins, 1555
Torbitt, William Ferguson, 505
Towers, Leo F., 1009
Towert, E. S., 1562
Towle, Clarence Clarke, 696
Tracy, Edward Andrew, 1554
Trammell, Robert Hardy, 1468
Travis, John Joseph, 59
Traynor, Seymour, 59
Treacy, Edward Aloysius, 203
True, Charles Clifford, 59
Trueman, Harmon Silas, 1555
Tucker, John Ira, 1872
Tullis, Alexander, 358
Tunison, Geoffrey Orlando, 1793
Turbow, Bernard M., 1250
Turner, Harriet M., 59
Turner, Levi Y., 695
Turner, Louis Ignatius, 359
Turner, William Brooks, 2045
Tuttle, Fred E., 1793
Twitchell, Robert Alexander, 1555
Tyson, William E., 59

U

Underwood, Laban Benjamin, 358
Utley, Jay Hathaway, 1167

V

Vadasz, Joseph, 59
Vaden, William Edgar, 1638
Valentine, Edwin James Glass, 1555
Valentine, Margaretta Rulison Riegel, 1638
Vallette, William Omar, 696
Van der Hulse, Judson Arlington, 696
Vanderlaan, John, 58
Van Derlyn, J. Du Bois, 1394
Van Dolsen, William Walling, 1468
Van Dyke, Frank Howard, 696
Van Gieson, William H., 1554
Van Kirk, Frank S., 1965
Van Korb, William, 359
Van Neste, George Vredenburg, 696
Van Pelt, Levi A., 1324
Van Zandt, Thomas Kelly, 1554
Van Zile, Dewitt Clinton, 1168
Velez Lopez, Rafael, 771
Vick, John Thomas, 1555
Volden, Mathew Nelson, 1637
Von Beust, Max, 772
Vorwerk, Anthony H., 696
Vosburg, Harry Arthur, Jr., 275
Vreden, Roman Romanovich, 769
Vrooman, Frederick Eugene, 622
Vrooman, Fulton Schuyler, 1554

W

Waggoner, Thomas T., 1167
Wagoner, Marjorie Sharps Jefferies, 771
Wahl, John H., 1965
Wainwright, Jonathan Mayhew, 621
Walbeck, Henry C., Jr., 622
Walker, Dale L., 1250
Walker, John James, 770
Walker, Ralph Coffyn, 1394
Walker, Robert S., 1965
Walker, Rossie R., 1638
Wallace, Edward Lee Roy, 359
Wallace, Gurney Claycomb, 853
Wallace, William Jones, 1637
Waller, George Phillips, Sr., 506
Waller, William H., 2045
Wallis, George W., 428
Wallis, Robert Wilcox, 696
Walsh, John Edgar, 275
Walsh, Louis Edward, 59
Walsh, Nicholas Vincent, 274
Walters, Eugene, 428
Walton, Frank Leavens, 1638
Wanshenk, Ossip, 621
Ward, Henry S., 2044
Wardlaw, Herbert Rogers, 1638
Warner, William Arthur, 1167
Warren, Angela L. Ford, 359
Wash, Bishop, 854
Watson, Stuart Mills, 854
Watson, William Newbold, 427
Watzek, John W., 1167
Weagley, Theodore Hamilton, 1637
Wean, Clarence Burdette, 1638
Weaver, Joseph Milton, 1469
Weaver, Milton Edward, 1964
Weber, Timothy Charles, 1250
Webster, William, 2044
Wechsler, Max Adolph, 505
Wedig, John Harrison, 1250
Weida, Jerome Butz, 1555
Weidler, Walter Baer, 275
Weinshank, Osife: See Wanshenk, Ossip
Weinshenker, Omer Borris: See Wanshenk, Ossip
Welsenburg, Theodore H., 427
Welthas, Richard Charles, 1249
Welch, George E., 1393
Welch, John A., 1167
Wells, William Erastus, 1250
Weltmann, O., 202
Wendt, Wilbur Ervin, 1638
Weymouth, George Weare, 771
Whalen, Clarence James, 275
Wheeler, Ernest Paul, 1168
Wheeler, George Bonnie, 1323
Whidden, Eugene K., 1009
Whipple, Clarence D., 1168
Whitaker, Robertson A., 1324
Whitledge, George A., 854
Whitten, Harry Hood, 1168
Whitty, John Thomas, 358
Whyte, William Elias, 204
Wickett, Albert De Forest, 274
Wickham, Frank, 506
Widman, Albert Victor, 428
Widner, Joe Elmer, 935
Wieland, Frank, 1722
Wilbur, Walter, 1793
Wilcox, Frederick Ernest, 853
Wild, Joseph Zimmerman, 1167
Wilder, James Randall, 935
Wilkerson, Charles E., 853
Wilkins, Robert Lee, 428
Wilkinson, Hugh, 934
Williams, H. Marion, 1167
Williams, John Albert, 1555
Williams, John Tyler, 1168
Williams, John W., 505
Williams, Robert Dennis, 1323
Williamson, Archibald, 1250
Willis, Lyle Joseph, 853
Willoughby, Edward Orton, 1638
Wilson, Edwin K., 1793
Wilson, James Cornelius, 1467
Wilson, Jeremiah Calfer, 1324
Wilson, William H., 934
Wiltshire, James Sigel, 1793
Windham, Roy A., 854
Winneman, Frank A., 1167
Winship, Ernest Oliver, 275
Winstead, Rolland Tyson, 506
Winters, Joseph Schofield, 934
Winters, William Joseph, 506
Wire, William Shidaker, 428
Witkowski, Leon Joseph, 1468
Witter, William, 772
Wolfe, Frank Edwin, 1323
Wolfe, Isaac Errett, 428
Wolff, Carl Friedrich, 854
Wolff, Sylvian Beer, 771
Womble, Leigh Hubbard, Jr., 1793
Wood, Harry, 506
Wood, Howard M., 1168
Woodcock, Burgett, 1792
Woods, Robert J., 428
Woolner, Arthur B., 1324
Woolsey, Jefferson, 1250
Worthington, David Henry, 506
Wright, Alfred T., 1009
Wright, Charles Wardsworth, 1554
Wright, Chester A., 1168
Wright, Lonnie L., 854
Wright, Samuel A., 935
Wright, Samuel St. John, 358
Wyman, Charles W., 854
Wyman, Edmond Lewis, 1469
Wyndham, Charles Arnold, 1723
Wynkoop, Henry John, 1637

Y

Yager, Orville B., 772
Yates, David H., 854
Yoder, Ivan Isaac, 621
Yoffe, Samuel, 1555
York, Albert Isaiah, 1871
Young, Harve George, 854
Young, Herbert Keith, 1872
Young, Philip Gourley, 1723
Youngman, John W., 1723

Z

Ziegelman, Edward Frank, 1323
Zille, Ernst, 1009
Zimmermann, William, 2044
Zinger, Francis Xavier, 1394
Zinn, P. R., 1962
Zohlen, John Peter, 58
Zubizarreta, J. M., 1791

E

EAR: See also Deafness; Hearing; Otolaryngology; Otosclerosis
cauliflower, method for correction, [Jobson] 1437—ab
diabetic gangrene of, [Brier] ★1704
embryology, 626
herpes zoster oticus, diagnostic factors, [Fenton] ★468
itching (bilateral), 1090
Middle Ear infection: See Otitis Media
telephone noises cause tympanic rupture, 282; 1015
vestibular disorders and intracranial hypertension, [Barré] 1893—ab
EATING and Cooking Utensils: See Aluminum kettle; Enamel ware
EAVEY'S E Brand Strained Products, 111
EBERS Papyrus: See Papyrus
ECHINOCOCCOSIS: See Brain; Liver; Lungs
ECLAMPSIA, anuria and oliguria in, [Spickmann] 226—ab
clinical aspects, [Fauvet] 878—ab
hyperammonemia in, [Llusia] 1032—ab
kidney function in, [de Snoo] 1493—ab
paralysis and, [Schwanen] 455—ab
pituitary involvement, 1165
pituitary posterior lobe, nephropathy and, [Anselmino] 1897—ab
preeclampsia, diagnosis, treatment, [Heynemann] 1187—ab
preeclampsia pressure of cutaneous vessels in, [Raisz] 1188—ab
prevention, [Siedentopf] 1031—ab
treatment, magnesium sulphate intravenously, [McNelle] ★548; (correction) 846; [Rucker] 1572—ab
treatment, rupture of membranes in, [Stroganoff] 1104—ab
ECONOMICS, Committee on Economic Security, Conference, 1454—E; 1543; 1624—E; 1627
nutrition and industrial depression, England, 1388
ECONOMICS, MEDICAL, Care of Indigent: See Medical Service
conditions of the profession, Spain, 1392
Congress on (first), Buenos Aires, 1791
credit bureau established, Peoria, 1314
credit bureau formed, Winona County, 1075
ECONOMICS, MEDICAL—Continued
credit department of Medical and Dental Business Bureau, Indianapolis, 495
pay for treatment of roads accidents, 199; 2038
pay patients in charity hospitals, France, 1633
President Brumm's message to Philadelphia County Society, 927
President Roosevelt's statement on responsibility of care of sick, 1953—ME
socialized medicine jeopardizes office buildings, 1953—ME
successful industrial group practice, [Bloom] 1155—ME
survey, California, 1859
ECTODERMOSES, congenital, [Kulchar] 1023—ab
ECZEMA: See also Ringworm
allergic, diagnosis and treatment, [Coca] ★1275
bakers', cause, 787—ab
chronic atopic (neurodermatitis) in childhood, [Hill] ★1439
facial, from beaked flutes made of cocobolo wood, [Meister] 2058—ab
infantile, sensitivity to fungi in, [Hill] ★331
Seborrhoicum: See Seborrhea
therapy, [Fantus] ★1305
Varicose: See Varicose Veins
EDELWEISS Pineapple Juice, 919
EDEMA: See also Ankle; Ascites; Dropsy; Lungs; Lymphedema; Nephritis
angioneurotic, Quincke's disease, 1562
etiology, infection (toxins) [Busson] 1108—ab
fluid intake in, 1170
formation, composition of lymph in, [Weech] 443—ab
menstrual, [Sweeney] ★234; 1255
neuropathic, elephantiasic form, [Horsch] 452—ab
treatment, calcium chloride in large doses, [Gurevich] 1898—ab
EDUCATION: See Children, school; Schools; Students; University
by Radio: See Radio
Nursing: See Nursing
EDUCATION, MEDICAL: See also Graduates; Internships; Schools, Medical; Students, Medical; etc.
A. M. A. Annual Congress on (Feb. 1935), 1713
EDUCATION, MEDICAL—Continued
committee report, England, 617
curriculum, ★571
graduate course in obstetrics, Mississippi, 1629
graduate courses, A. M. A. resolution on state medical societies offering, 1544
graduate courses, institutions offering, approved by Council, ★537
graduate courses, Iowa, 999; 1315
graduate dermatologic training, [Lane] ★541
graduate, institute for, Toledo, 1316
graduate instruction relation to public health, [Parkins] ★545
graduate instruction, relation to state society, Massachusetts, [Parkins] ★546; ★547
graduate medicine at U. of California, 1544
graduate study, centers, Michigan, 999
in physical therapy, Pennsylvania, [Krusen] ★1944
in U. S., and Canada, presentation of data, ★565
length of course, ★570
premedical training, ★565
reform, Soviet Union, 1551
teaching (undergraduate), of gastro-enterology, [Andresen] ★537
training of physician in Russia, [Swanish] ★1798
training of South Africa natives, 1632
EDWARDS Brand Chocolate, 260
EGGS and arteriosclerosis, 639—ab
duck, food poisoning from, 1720
Noodles: See Noodles
ELBOW: See also Olecranon
joint, displacement of internal epicondyle into, [Roberts] 790—ab
tennis, [Boshamer] 905—ab
ELCO Brand Syrup, 260
ELECTRIC: See also Electrosurgery; etc.
air blower for drying wounds, [Burton] ★338
Currents (high frequency): See Diathermy
potential of skin in relation to colds, 423
shock, treatment, 435
ELECTROCAUTERY: See Larynx tuberculosis
ELECTROCOAGULATION: See Diathermy
ELECTROGRAPHY: See Uterus contraction
ELECTROHEALING, regulation of quackery, Japan, 1553
ELECTRONEUROLYSIS: See Neuralgia, trigeminal

ELECTRO-RADIO-BIOLOGY, International Congress on (first), 53: 498
ELECTROSURGERY: See also Gallbladder
Burdick Electrosurgical Unit, 1619
shock and collapse, [Schörcher] 146—ab
ELECTROTHERAPY: See also Neuralgia, trigeminal; Short Waves; etc.
Electro Therapy Products Corporation, generators, 1621
ELECTROVITA: See Elsaco
ELEPHANTIASIS: See also Edema, neuropathic
experimental, in animals, [Homans] 1887—ab
produced by lymphatic obstruction, 191—E; [Drinker] 370—ab
ELIOT, MARTHA M., becomes assistant chief of Children's Bureau, 1858—E; 1863
ELLIOTT Treatment: See Pelvis
ELSACO (Electrovita), 1873—Bl
ELTON (E. H.) Dairy Vitamin D Milk, 1623
EMBALMER: See under Medicolegal Abstracts at end of letter M
EMBOLISM: See also Thrombosis
after gynecologic operations, 1865
cerebral, after pneumothorax and oleothorax, [Renner] 1895—ab
diagnosis, differential, from thrombus, 1091
increase, 355
mesenteric, [Green & Allen] *11; [Ralph] 508—C; (reply) [Green] 508—C; [Dunphy] 1737—ab
problem, 1789
pulmonary, in trauma, [Vance] 1806—ab
treatment, pavaex apparatus, [de Takáts] *1921
EMBRYO Cultures: See Smallpox vaccination
EMBRYOLOGY, da Vinci's knowledge of, 768
of ear, 626
EMERGENCY RELIEF Administration (federal)
financial aid for college students, 420; *575
Administration (federal), malaria control projects, New Mexico, 1861
Administration (federal), medical director appointed, 1387
Commission, Illinois, physical examination of employees, 350
EMESIS: See Vomiting
EMETINE Hydrochloride: See Amebiasis treatment
EMPHYSEMA, bulla mistaken for pneumothorax, [Karan] 1482—ab
inspiratory distention relation to, [Prinzmetal] 712—ab
interstitial, after rib fracture, 514
treatment, abdominal binder, [Meakins & Christie] *384
EMPLOYEES: See Industrial; Workmen's Compensation Acts
EMPYEMA, anaerobic streptococci, [Fisher] 1652—ab
chronic, chemical destruction of periosteum for, [Jachia] 1024—ab
treatment, surgical, [Frank] 1180—ab
ENAMEL, Mottled: See Teeth
ware, antimony poisoning from, 54
ENCEPHALITIS: See also Meningo-Encephalitis
congenital, in child after maternal influenza, [Stewart] 1735—ab
hemorrhagic (acute), arsenic in brain, [Osterberg] 709—ab
liver function tests in, 1866
terminology, 773
ENCEPHALITIS, EPIDEMIC, 758—E
clinical features, St. Louis type, [Kinsella & Broun] *462
diagnosis and symptoms, St. Louis, [Hempelmann] *733
epidemiology, St. Louis type, [Leake & others] *728
etiology, [Muckenfuss & others] *731
handling of St. Louis epidemic, [Bredeck] *827
in Fremont, Ohio, 763
in Illinois, 495; [Conklin] 828—ab; 925; 998
in Indiana, 844; 999
in Japan, 770
in Philadelphia, survey, 763
in St. Louis, prognosis, [Jones] *825
pathologic changes of St. Louis type, [McCordock & others] *822
problem, [Neal] *726
research, prize announced by U. of Bern, 1001
sequels, survey, St. Louis type, 1075
sequels, visual spasms, [Engerth] 1414—ab
symposium on, [Neal] *726; [Leake & others] *728; [Muckenfuss & others] *731; [Hempelmann] *733; [McCordock & others] *822; [Jones] *825; [Eschenbrenner] *826; [Bredeck & Zentay] *827; (discussion) 828
treatment, roentgen, [Goldberg] 447—ab
treatment, St. Louis epidemic, [Eschenbrenner] *826
virus, demonstrated by cornea vaccination, [Rupilius] 302—ab
virus of St. Louis type, lymphocytic choriomeningitis produced by, [Armstrong] 1103—ab
ENCEPHALOGRAM; **ENCEPHALOGRAPHY**: See Brain
ENCEPHALOPATHY: See Brain disease
ENDAMOEBA histolytica Infestation: See Amebiasis
ENDARTERITIS, carcinomatous, pulmonary, [Greenspan] 1652—ab
coronary, in acute rheumatism, [Fraser] 1990—ab
obliterative, intermittent negative pressure (Landis; Herrmann's Pavaex) in, 1562; [de Takáts] *1922
ENDOCARDITIS, lenta, bacteremia and blood picture in, [Wydrin] 1495—ab
lenta, vaccinotherapy, [Dimitracoff] 76—ab
staphylococcus aureus, [Baumgartner] 141—ab
subacute, streptococci that resemble diphtheroids in, [Ferguson] 1487—ab
ENDOCERVICITIS: See Uterus cervix
ENDOCRINES: See also under names of specific endocrines
diagnosis and therapy based on female hormone studies, [Frank & others] *393
disorder, underdevelopment as, 703
dwarfism; antuitrin G plus thyroid extract for, [Engelbach & Schaefer] *164
effect on teeth development, 129; 1963
importance in mechanism of fever, 2043
menstruation disorders due to, [Elden] 1098—ab
roentgen stimulation, [Lehmann] 1740—ab
ENDOLIMAX nana, amebiasis, 63
ENDOMETRIOMA of Bartholin's gland, [Duncan] 526—ab
ENDOMETRIOSIS: See Endometrium, aberrant
ENDOMETRIUM, aberrant, surgically important localizations, [Fürst] 532—ab
aberrant, sign of ovarian dysfunction, [Jeffcoate] 1992—ab
roentgen study, thorium hydroxide sol, [Meuses] 1988—ab
ENEMA, postoperative, [Countryman] 1738—ab
ENERGY claims for foods, Committee on Foods General Decision, 1452
Radiant: See Radiant Energy
ENRIGHT, JAMES A., sentenced, 1545
ENTERITIS: See Intestines, inflammation; Lambliasis
ENTEROBIUS vermicularis: See Oxyuris
ENURESIS: See Urine, incontinence
ENVIRONMENT and heredity, influence on twins, 1721
EOSINOPHILIA after epinephrine tolerance test, [von Krompaszky] 1493—ab
blood, determination, [Friedman] *1618
in allergic conditions, [Knott] 377—ab
EPENDYMITIS, primary, [Arnold] 785—ab
EPHEDRINE: See also Benzylephedrine
alkaloid solution (1 per cent), dissolving in mineral oil, 777
for dilating pupils, 1647
heart irregularities produced by, [Meek] 525—ab
sulphate, continued use in fatigability harmful? 1174
sulphate orally, effect on creatinuria, [Light & Warren] *410
Treatment: See Myasthenia gravis; Sleep disorders
EPICONDYLE, internal, displacement into elbow joint, [Roberts] 790—ab
EPIDEMICS, news of, U. S., 197; 498; 1001; 1957
EPIDIDYMITIS: See also Orchiepididymitis
bilateral, 1091; 1647
diagnosis, differential, new sign, [Prehn] 872—ab
EPIGASTRIUM Hernia: See Hernia
pain in stomach diseases, [Pieri] 877—ab
EPIGLOTTIS, function in deglutition, 940; (reply) [Batson] 1399
function in speech, 1797
EPILEPSY: See also under Medicolegal Abstracts at end of letter M
blood calcium in, [Griffiths] 1490—ab
blood sugar in, [Maarssø] 226—ab
etiology, atopy, [Forman] 1484—ab
etiology, especially in twins, [Rosanoff] 293—ab
migraine and neuropsychiatric disorders relation to, [Paskind] 785—ab
pitressin test in, [Jacobsen] 296—ab
possible, 860
seizures, thermo-electric recorder of cerebral blood flow, [Gibbs] 947—ab
syphilis with, 1643
transmission of, to children possible up to 8th year? 776
treatment, air introduced periodically by lumbar route, 768
treatment, barbiturates, [Handley] 1992—ab
treatment, bromides, deteriorating effects absent, [Paskind] *100
treatment, by hypertonic solutions (sodium chloride, sodium bromide), [Villey-Desmeserets] 1185—ab
treatment, ovary extract, [Stanca] 1897—ab
EPINEPHRINE, cholecystography (rapid) and, [Zanetti] 451—ab
effect on sympathectomized extremity, [Smithwick] 2056—ab
hypertension and paragangliomas, [Bauer] 1492—ab
injection (intravenous), hypotensive action, [Herlitzka] 76—ab
injection, plasma cholesterol response to, [Bruger] 71—ab
EPINEPHRINE—Continued
injections, palpitation and nervousness after, 860
permeability of erythrocytes vs. heparin, [Kuczarow] 147—ab
Tablets Procaine Borate and Epinephrine, 1708
tolerance test, eosinophils after, [von Krompaszky] 1493—ab
Treatment: See Bee stings; Dystrophy, muscular
EPIPHYSIS, cartilage modifications in rickets, [Dodds] 867—ab
EPITHELIOMA: See Chorio-Epithelioma; Lympho-Epithelioma
EPITHELIUM: See also Gallbladder
benign invasion, [Boyd] 1408—ab
ERGOSTEROL, Irradiated: See Viosterol
ERGOT preparations, stability, [Rothlin] 1267—ab
ERGOTAMINE Tartrate: See Migraine treatment
EROSIONS: See Teeth; Uterus cervix
ERUPTIONS: See also Acne; Creeping Eruption; Drugs; Eczema; Quinine
papulopustular (epidemic) in coal miners, [Dowling] 141—ab
ERYSIPELAS complications, necrotizing ulcers, [Stookey & others] *903
recurrent, 1557
Streptococcus Antitoxin (Refined and Concentrated) (U. S. S. P.), 412
toxins (Coley), Council report, 1067; 1070—E
treatment, [Fantus] *183
ERYTHEMA nodosum, 207
nodosum and tuberculosis, 1791
ERYTHRASMA, treatment, [Fantus] *832
ERYTHREMIA: See Polycythemia
ERYTHROBLASTOSIS of new-born, treatment, [Arnold] 446—ab
fetal, [Péhu] 1994—ab
ERYTHROCYTES: See also Blood cells
diameter determined by diffraction, [Keller] 1268—ab
disintegration in malariotherapy, [Végh] 1897—ab
epinephrine permeability, heparin effect on, [Kuczarow] 147—ab
insulin destroying power, [Rosenthal] 1108—ab
Sedimentation: See Blood sedimentation
size in normal conditions and various liver diseases, [Angelini] 1813—ab
susceptibility to malaria, [Eaton] 1652—ab
ESCALIER, J. M., death, 1791
ESCHATIN: See Suprarenals cortex
ESKIMO children, study, 614
ESOPHAGOSCOPE, sharp dissection through, [Equen] *1845
ESOPHAGUS, cancer, radiation for, [Cleminson] 142—ab
foreign bodies, bobbin, removal, [Equen] *1845
sequelae of war gassing, [Worms] 144—ab
stenosis, thiosinamine in, 704
ESTRIN, action in terminating pregnancy, [D'Amour] 526—ab
excretion, [Robson] 220—ab
high concentration in fibro-adenoma of breast, [Lewis & Geschickter] *1212
in breast atrophy, 1796
injured testicle, spontaneous recovery, [De Jongh] 536—ab
pineal body contains, 1626—E
ETCHING: See Art
ETHICS, MEDICAL, new methods of practice, 263—E
of patenting discoveries, 2042
rebates and commissions, 1071—E; [Hovey] 1088—C
sale of practice as problem in, 1466
***di*ETHYLENE DIOXIDE** (dioxan), deaths due to, 689
ETHYLHYDROCUPREINE, amaurosis after applying, [Griffey] 527—ab
EUGENICS: See also Sterilization, Sexual
international committee for standardization of methods in, 1081
EUROPEAN population in Dutch East Indies, 425
EUSTACHIAN TUBE obstruction, heat bougies for, [Simon] 442—ab
EUSTACHIUS, BARTOLOMÆUS, commemoration, 1963
EVER READY Biscuit Flour, 1379
EVIDENCE: See also under Medicolegal Abstracts at end of letter M
expert witnesses, problem, France, 1003
EVOLUTION, progress in study of; Penrose Lecture, 1625—E
EXANTHEMS: See Eruption; Mouth; Typhus
EXCELSA Mushrooms, 342
EXERCISE: See also Athletics; Exertion; Foot imbalance
diabetes and, [Collazo] 77—ab; [Soskin & others] *1767; [Richardson] 1985—ab
influence on metabolism, 1866
Stretch-A-Way Reducer and Health Exerciser, 1621

EXERCISE—Continued
tolerance test for angina pectoris, [Riseman] 1979—ab
tolerance test (metabolic), [Soskin] 215—ab
EXERTION, sudden, coronary thrombosis after, 1876
EXHIBIT: See American Medical Association; Health; Medicine, progress
EXOPHTHALMOS: See also Goiter, Exophthalmic
after thyroidectomy, 699
cataract operation in, 130
mechanism, [Brain] 772—C
pulsating, due to internal carotid-jugular aneurysm, [Terry & Mysel] *1036
EXOTOXIN: See Staphylococcus
EXPERT Witnesses: See Evidence
EXPLOSIVES, manufacture, hazards in, 434
EXTO-RAC, 1084—BI
EXTREMITIES: See also Arm; Fingers; Foot; Hand; Legs
lymphedema, [Allen] 1652—ab
sympathectomized, effect of epinephrine on, [Smithwick] 2056—ab
EXUDATES: See Pericarditis; Pleura
EYELASH, dye, dermatitis from applying Godfrey's hair dye to, [Rattner] *180
dye, fatality from Lashlure, [Forbes & Blake] *1441
EYELIDS: See also Reflex, winking
coloboma of upper, repair, [Peer] 442—ab
dermatitis, 1877
dermatitis from Godfrey's hair dye and permanent wave solution, [Rattner] *180
necrotizing ulcers complicating erysipelas, [Stookey & others] *903
ptosis of upper, 1973
venous ectasia or melanoma, 1646
warts on, 209
EYES: See also Blindness; Cornea; Ophthalmos; Glasses; Ophthalmology; Orbit; Pupils; Retina; Uveal Tract; Vision; etc.
burns of anterior segment by steam and by acid, 1633
Closing: See Reflex, oculopharyngeal
conditions in hair industry employees, 1562
conditions, use of thyroxine in, [Jameson] 1983—ab
diseases in renal diseases, 2040
diseases, influence of weather on, 1390
examination and the dispensing optician, 1856—E
examination, of air pilots, England, 1632
glass, proper care of orbit with, 282
glass, use, 363
ground in inguinal lymphogranuloma, [Kitagawa] 301—ab
inflammation and trauma to skull, 1972
lesions from thallium acetate poisoning, [Swab] 1485—ab
pad, Altherm, 563
pain (periodic) in, 363
paralysis of convergence, 860
"specialists," 419; 685
strain, 83—ab
Trauma: See Uveal Tract
EYESIGHT: See Vision

F

FACE: See also Cheek; Jaws; Lips; Mouth; Nose; etc.
acneform eruptions, foods as causing, [White] *1277
deformities, reconstructive surgery in, [New & Figi] *1434
diabetic gangrene, [Brier] *1704
eczema from beaked flutes made of cocobolo wood, [Meister] 2058—ab
furuncle, surgery, [Schmid] 380—ab
isolated chancre-like pyodermia, [Hoffmann] 1742—ab
Paralysis: See Paralysis
powder, liquid, 861
tumor, angioma with brain cortex calcifications, [Krabbe] 1655—ab
warts on, bismuth salicylate intramuscularly, 775; (reply) [Lurie] 1399
FAIRBANK Farms Vitamin D Milk, 1623
FAIRY Queen Self-Rising Flour, 341
FALL, relation of premature labor to, 62
FALLOPIAN TUBES, Pregnancy in: See Pregnancy, extra-uterine
Transplantation: See Sterilization, Sexual
FAMILIES, promoting hereditarily healthy, Germany, 1721
FARMER Jones Brand Sorghum Syrup, 918
FARMS, Quarantine: See Tuberculosis, bovine
FAT, aspiration, pneumonia after, [Goodwin] 945—ab; [Grayzel] 950—ab
diet (high) effect on gout, [Lockie & Hubbard] 1883—ab
diet (high), effect on respiratory quotient, [Bowen] 1737—ab
diet (low) in psoriasis, 56; [Grütz] 793—ab
in Feces: See Feces
metabolism, hypophyseal hormones of, [Anselmino] 879—ab
necrosis, production, [Neal] 289—ab
tolerance test in pituitary disease, [Goldzieher] 870—ab
FATIGUE, progressive, and hypertension, 1254
treatment, ephedrine sulphate, continued use harmful? 1174
FAUCET handle injuries, [Maloney] *1618
FAURE, JEAN-LOUIS, 422
FAUST Brand Syrup, 564
FEBRICULA: See under Fever
FECES, blood in, method for demonstrating, [Basa] 533—ab
blood in, benzidine test, [Hablützel] 1994—ab
fat in, idiopathic steatorrhea, [Thaysen] 1998—ab
Fistula: See Fistula
viscosity, increasing, 702
FECUNDITY: See under Medicolegal Abstracts at end of letter M
FEDERAL Emergency Relief: See Emergency
FEDERATION of Medical Associations: See Societies, Medical
FEEBLEMINDED: See Mental Defectives
FEEDING: See Diet; Infants; etc.
FEES, flat, in industrial medical service, [Nordholz] 1641—C; 1863
for C W A service, [Spilliman] 1010—C
number of patients paying Alameda County (Calif.) plan, 998—ME
payment of physicians for road accidents, England, 199; 2038
workmen's compensation acts and, [Beebe] 855—C; Bureau of Legal Medicine and Legislation comment, 855—C
FELLOWSHIPS: See also Scholarships
for study of adolescence at Yale, 1783
in physiology, 1786
Jacobi, for women physicians, 1863
FELSOL, 497—BI
FEMUR, fracture (intracapsular) of neck, reduction and fixation, [Fay] 1570—ab
fractured neck, osteosynthesis by Smith-Petersen nail, [Wright] 221—ab
FERMENTS in uterine cancer, [Nakahori] 790—ab
FERN, Male: See Tapeworm Infestation
FERNDALE Farms Vitamin D Milk, 341; 919
FERRAC, 1084—BI
FERRIC Oxide: See Jeweler's rouge
FERROCYANIDE: See Kidney function test
FERROUS Iodide: See under Iron
FETUS: See also Embryology; Infants, Newborn
activity of trophoblast in extra-uterine pregnancy, [Kaplun] 1110—ab
Death: See also Stillbirth
death, 1092
death, chronic nephritis as cause, 62
death in extra-uterine pregnancy, pituitary reaction in, [Spitzer] 1110—ab
death of male, cause, 1390
death, roentgen diagnosis, [Brakemann] 878—ab
erythroblastoses, [Péhu] 1994—ab
kidneys excrete urine? 126; [Waldman] 778
membranes of Dionne quintuplets, 1398
membranes, rupture in treatment of eclampsia, [Stroganoff] 1104—ab
size, determination, reducing premature infant mortality by, [Clifford] *1117
FEVER: See also Rheumatic Fever; Scarlet Fever; Temperature, Body; Typhoid; Undulant Fever; Yellow Fever; etc.
acute, and liver function, [Brochner-Mortensen] 1998—ab
febricula and thyroid function, [Macchioro] 952—ab
fraudulent, 511
mechanism, importance of endocrine factors, 2043
Parrot: See Psittacosis
reaction after operation, 362
Therapeutic: See also Arthritis: Dementia Praecox; Malaria, therapeutic; Neurosyphilis; Paralysis, General; Spotted Fever, therapeutic
therapeutic, 933
therapeutic, induced by Kettering hypertherm (air conditioned cabinet), 1381—E
therapeutic, induced by physical means, (Council report) 1308; [Bierman & Fishberg] *1352
Tick Bite: See Spotted Fever
treatment, [Fantus] *484; (alcoholic beverages in) [Shattuck] 1376
FIBRINOGEN formation, reticulo-endothelium rôle in, [Reid] 1108—ab
in Blood: See Blood
FIBRO-ADENOMA of breast, estrin yielded by, [Lewis & Geschickter] *1212
FIBROBLASTOMA, mediastinal and intraspinal perineurial, [Harrington & Craig] *1702
FIBROMAS of small intestine with intussusception, [Smith] 286—ab
of Uterus: See Uterus, tumor
of vagina resembling cystocele, [Mattson] *1090
FIBROSARCOMA: See Osteochondrofibrosarcoma
FIBROSIS: See Lungs
FILARIA: See Dirofilaria; Filariasis
FILARIASIS of scrotum and groin, [Young] 1655—ab
rare case of bancroftosis, [Froes] 634—ab
FILM: See Motion Pictures
FILTH, flies and bacteria, 921—E
FILTRATE Treatment: See Trichomoniasis
FILTRATION: See Water
FINGERS: See also Nails
clubbing (unilateral), 281
contracture (ischemic) after arm fractures, [Scherb] 1813—ab
necrosis of distal phalanx of thumb, 514
stiffening, treatment, [Lange] 381—ab
FINLAY, CARLOS, street named for, Paris, 849
FIREMEN, typhoid outbreak, Chicago, 116
FIREWORKS, New Haven to prevent sale, 613; 922—E
poisons found in, [Aikman] *641
FISCHERQUARTZ "Cold" Ultraviolet Lamps, 1620
FISH: See also Salmon
storage, England, 1078
Test: See Pregnancy diagnosis
FISHER, WILLIAM, jailed, 1073
FISHER'S Biscuit Mix, 681
Pancake Four, 341
FISSURE: See Lips
FISTULA, anal, or pilonidal cyst in ano, 1645
branchial cysts, 1877
fecal, care of skin around, with boric acid powder in zinc oxide, 1973
intestinal, bacteriophage in, [MacNeal] 2056—ab
pancreatic, complete external, [Garis] 1809—ab
pararectal, [McIntyre] 289—ab
postoperative duodenal, insulin for, 1867
urogenital, intravenous urography, [Dobrzaniecki] 876—ab
vaginal, in cervical cancer, [Smith] 1567—ab
vesicovaginal, from prolapse ulceration, [Ratnayeke] 1105—ab
FLATULENCE, gaseous distention of bowel, 702
postoperative, prostigmine in, [Carmichael] 143—ab
FLETCHER, WALTER (Sir), memorial to, 198
FLEXNER Dysentery: See Dysentery
FLIES, filth and bacteria, 921—E
Maggots Infestation: See Myiasis
sanitation of garbage, 2050
source of amebiasis, [McCoy & Chesley] *1145
FLORENCE Nightingale Foundation: See Foundations
FLOUR: See also Biscuit; Bread; Pancake
Bakebest Bakers, 261
Baker's Special Hard Wheat, 261
Craftsman Baker's, 261
Fairy Queen Self-Rising, 341
La Campana, 261
Mello Loaf Bakers, 261
Victor, 261
FLUKES, Paragonimus westermani: abdominal involvement, [Bercovitz] 714—ab
FLUORIDE: See Sodium fluoride
FLUTE player, facial eczema in, from beaked flutes made of cocobolo wood, [Meister] 2058—ab
FLY: See Flies
Ash: See Ash, precipitator
FOGS, contaminations, 503
FOLIN, OTTO K. O., memorial services, 1955
FOLLICULIN activity, breast congestion sign of, [Sauphar] 222—ab
FOLLUTEIN: See Testicles, undescended
FONTANA'S Egg Noodles, 1229
Egg Vermicelli Fideos, 1229
Mushroom Gravy, 838
Semolina Macaroni, 1151
Semolina Spaghetti, 1151
FONTANEL, premature closure, 2046
FOOD: See also Diet; Infants, feeding; Meat; Nutrition; Vegetables; Vitamins; etc.
adulteration in Madrid, 1392
Allergy: See also Wheat
allergy, acneform eruptions, [White] *1277
Color: See Color
Du Barry's Food, 111
energy claims for, Committee on Foods General Decision, 1452
faddists, [Rehfuss] *1600; (discussion) 1604—ab
handlers, amebiasis carrier problem, [McCoy & Chesley] *1146
handlers examination discontinued, (New York City) 1000; (Maine) 1384
of Chinese, 625
Poisoning: See also Botulism
poisoning, [Russ] 306—ab
poisoning from duck eggs, 1720
poisoning, ingestion of staphylococcus exotoxin, [Dolman] 1487—ab
poisoning, restaurants padlocked, Manila, 688
sale, banned at circus on account of typhoid in performers, 417
special purpose, Committee on Foods amended rule on, 755
special purpose foods for diets restricted in dextrose formers, Committee on Foods General Decision, 681
storage, 929; 1078
storage (cold), vacuum packing alternative to, 1959
tolerances for arsenic, copper, and lead in, Committee on Foods report, 29
U. S. Food and Drugs Act appropriations, 2032—E
value of beer, 1951—E
vitamin D and calcium in, 414—E
vitamin fortification, Committee on Foods decision, 189

FOOT: See also Ankle; Chiropodists; Shoes
coldness with soreness, differential diagnosis, 775
examining stand, [Diveley] *1511
flat foot, 1821—ab
imbalance: fallen arches, flat foot, etc., strapping, toe and heel exercises for, [Diveley] *1510
laceration from broken porcelain faucet handle, [Maloney] *1618
Ringworm of: See Ringworm
twister extraordinary—Mahlon Locke, 1153—E
FOOTBALL injuries, analysis, [Horan] *325
FOREGGER Infant Resuscitation Outfit, 677
FOREHEAD, deformities, [New & Figi] *1436
FOREIGN: See Europeans; Foreigners
Graduates: See Licensure
Medical Schools: See Schools, Medical
Mental Patients: See Mental Disease
Physicians: See Physicians
FOREIGN BODIES: See also Esophagus; Stomach
peritoneal tissue response to dusts introduced as, [Miller & others] *907
FOREIGNERS: See also Europeans
subject to sterilization law, Germany, 1391
FORENSIC MEDICINE: See Medical Jurisprudence
FOREST PARK Brand Pineapple, 1151
FORGERS, handwriting of criminals vs., 684—E
FORMALDEHYDE, dermatitis from, 433
FORMALIN: See under Medicolegal Abstracts at end of letter M
FORMOLIZED Toxin: See Scarlet Fever immunization
FORMOSA Imperial University, medical college, 1553
FORMULARY, standard, adopted in city hospitals, New York City, 1955
FOSTER, WILLIAM TRUFANT, 1310—E
FOUNDATIONS, International Foundation of Gynecology and Obstetrics, 1002
Georgia Warm Springs, 1954
Kellogg (W. K.), 925
Nightingale (Florence) International, 500
Rockefeller, 843; (1901): 1387; 1458
FOURTH OF JULY: See Fireworks
FOXES, rabies among, 614
FRACTURES: See also Calcaneum; Femur; Hip Joint; Jaws; Olecranon; Pseudarthrosis; Radius; Ribs; Spine; etc.
arm, ischemic contracture of fingers after, [Scherb] 1813—ab
Dislocation: See Wrist
healing, calcium and phosphorus effect on, [Haldeman] 1334—ab
nonunion, [Jones] 298—ab
operation for delayed union, [Carter] 1655—ab
symposium on, Minneapolis, 1861
treatment, cow's horn for fixation, [Fowler] 1335—ab
treatment, overpull during, [Blum] 1181—ab
FRAMBESIA, syphilis and, [Butler] 359—C
transmission, [Thomson] 1573—ab
FRANKFORD Brand Tomato Juice, 1453
FREEMAN'S Vitamin D Milk, 341; 1623
FREI Test: See Lymphogranuloma inguinale
FRENCH Assembly of General Medicine, 930
Congress of Gynecology, 55
Speaking Physicians: See Congress
Surgical Congress, 1549
Urological Congress, 1632
FRICKE-GLASSER X-Ray Dosimeter, 1946
FRICTION Method: See Organs, outlines
FRIEDMAN Test: See Pregnancy diagnosis
FRONTAL SINUSES, tumors involving, [New & Figi] *1436
FRUCTOSURIA: See Urine
FRUIT: See also Bananas; Cherries; Grapefruit; Oranges; Peaches; Pears; Pineapple; Prunes; Tangerines; etc.
German Fruit Salts, 1325—BI
juices, tetany after feeding, [Bäumler] 1493—ab
storage (gas), 930
FRYE'S Hydrocarboline Spray Solution, 697—BI
FUEL oil, typhoid and shellfish, 1865
FUMIGATION fumes, psychosis due to? 858
FUNGI Infection: See Mycosis
sensitivity in infantile eczema, [Hill] *331
yeastlike, pathogenicity, [Connor] 876—ab
FURUNCULOSIS in lead-silver mine workers, 2050
of face, surgery, [Schmid] 380—ab
of upper lip, radiotherapy, 1389
treatment, [Fantus] *411; (reply) [Smith] 1576
treatment, bacteriophage, [Eaton & Bayne-Jones] *1774
FUSION Operation: See Hip Joint tuberculosis

G

GADOXIN, 697—BI
GAG Reflex: See Reflex
GALACTOSE Test: See Jaundice; Liver function test
GALEGARI, GIOVANNI BATTISTA, death, 1081
GALEN, new translation found at Princeton, 418
GALLARDO, ANGEL, death, 426
GALLBLADDER: See also Bile; Bile Ducts; Biliary Tract
actinomycosis, [Lino] 302—ab
calcification, [Snodgrass] 1104—ab
calculi, draining common bile duct for, [Zinninger] 1990—ab
calculi with cholecystitis in boy aged 8, [Hamilton & others] *829
conditions, medical treatment, 509
disease, [Ravdin & others] *1504; 1797
disease, differential diagnosis, 1797
disease, phrenic pressure point in, [Bayer] 1661—ab
disease, stoneless, [Graham & Mackey] *1497
drainage, nonsurgical, 847
excision, electrosurgical, [Thorek] *169
function of epithelium, [Harding] 376—ab
hernia into umbilical cord containing, [Niebuhr & others] *16
inflammation, acute, [Touroff] 711—ab
inflammation, chronic, medical treatment, [Chiray] 791—ab
inflammation, garlic in, 777
inflammation with calculi in boy aged 8, [Hamilton & others] *829
physiology, applied, [Ivy & Bergh] *1500
regulator of enterohepatic circulation, [Heckmann] 223—ab
roentgen study, [Foged] 80—ab; 306—ab
roentgen study, cholecystokinic drugs, 1391
roentgen study, intensified oral, [Stewart] 945—ab
roentgen study, rapid with epinephrine, [Zanetti] 451—ab
GALVANIC Current Therapy: See Neuralgia, trigeminal
GALVANISM, Negative: See Hemorrhoids, treatment
GAMMA Rays: See Radium
GANGLIOMAS: See Paragangliomas
GANGLION: See also Meckel's Ganglion
stellate, local anesthesia applied to, 618
sympathetic, block, in arterial aneurysm, [Gage] 371—ab
GANGLIONECTOMY, lumbar, and ramisectomy, [Pfeiffer] 1889—ab
GANGRENE: See also Appendicitis, gangrenous
Diabetic: See Diabetes Mellitus
gas, and serotherapy, [Konjetzny] 303—ab
GARBAGE, disposal, Paris, 422
sanitation, 2050
GARDEN State Dairies Vitamin D Milk, 1623
GARDNER Creamery Co, Vitamin D Milk, 1709
GARDNER'S Kidneyaid: See Dr. Gardner's
GARGLING, [Snow & Stern] *831
accomplish its purpose? [Von Liebermann] 1030—ab
GARLIC: See Blood Pressure, high; Gallbladder Inflammation
GARST Bros. Dairy Vitamin D Milk, 1709
GAS: See also Chlorpierine gas
Bacillus: See Bacillus, welchii
dangers of sewers, 928
Diffusion: See Pneumothorax
Gangrene: See Gangrene
irritant, pulmonary edema from, [Henderson] *836
masks, children taught to wear, 1788
Mustard: See *di*Chlorethyl-Sulphide
Poisoning: See Carbon Monoxide; Cyanide
storage of fruit, 930
warfare, 1719
warfare, esophageal sequelae, [Worms] 144—ab
warfare on civilian population, defense, 1462
GASOLINE, dangers of sewers, 928
dangers of using for cleaning garments, 1063
poisoning in children, [Nunn & Martin] *472
sensitivity, desensitization, 279
GASTRIC Crisis: See Tabes Dorsalis
Digestion: See Digestion
Juice: See Stomach secretion
Ulcer: See Peptic Ulcer
GASTRITIS: See Stomach inflammation
GASTRO-ENTERITIS, acute, sensitivity to cow's milk proteins in, [Tallerman] 449—ab
GASTRO-ENTEROLOGY, American Board of, membership, A. M. A. resolution on, 44
colon bacillus infections, 2039
International Congress on (first), 1957
Italian society of, 1464
teaching (undergraduate), [Andresen] *537
GASTRO-ENTEROSTOMY result of typhoid immunization? 360
GASTRO-INTESTINAL TRACT: See also Colon; Intestines; Stomach; etc.
Allergy: See Abdomen
bran effect on, 701
cancer, 1466
cancer, liver metastases from, [Marting] 73—ab
deficiency symptoms, [Goudsmit] 724—ab
diagnostic study, brilliant blue FCF for, [Taylor] 522—ab
disease, heritability, 1080
disorder, outbreak, Fitchburg, Mass., 267
disorder resulting from avitaminosis, [Schlodt] 1898—ab
effect of alkali on peptide of thyroxine from, [Thompson] 1985—ab
GASTRO-INTESTINAL TRACT—Continued
in poliomyelitis, 846—E
rôle in conditioning deficiency disease, [Strauss] *1
GAURAN Reaction: See Gonorrhea diagnosis
GELATIN, Quaker Brand, 993
Treatment: See Dystrophy, muscular
Vogt Brand, 993
Water Tolerance Test: See Liver function test
GENITALS: See also Genito-Urinary Tract; Gonads; Vagina; etc.
cancer, in female, diagnosis, [Adler] 306—ab
cancer, relation to hypophysis, [Busse] 148—ab
surgery in female, anterior pituitary hormone given after, [Stöckl] 1997—ab
tumor, lymphosarcoma in female, [Walther] 223—ab
GENITO-URINARY TRACT disease, streptococcus in, [Culver] *637
GENIUSES: See Great Men
GEOFFROY, Dr., death, 766
GERMAN: See also Deutsche; Deutscher
Fruit Salts, 1325—BI
universities, tasks assigned to, 200
GERMANIN: See Trypanosomiasis
GERMANY, Hitler's persecution of Jews, 54; 689; 692; 1864
population movement, 1960
GESTATION: See Pregnancy
GIANT CELL Tumor: See Tumors
GIARDIA: See Lamblia; Lambliasis
von GIERKE'S Disease: See Glycogen storage
GINGER ALE, Varsity, 1855
GINGIVITIS: See Gums
GLANDS: See also Endocrines; Lymphatic System; etc.
of neck, infection, 1797
GLANDULAR FEVER, 1790
GLASS Eye: See Eyes
spun, dermatitis from "angel hair," 63
Ultraviolet Transmitting: See Ultraviolet Rays
wool industry, dermatitis in, 1644
GLASSES and dispensing optician, 1856—E
patented lenses; facts vs. advertising copy, [Cowan] *1377
tinted lenses, [Lehrfeld] 276—C; (reply) [Coblentz] 277—C
GLAUCOMA, de Grosz (Emile), honored, 932
primary, and epidemic dropsy, [Kirwan] 868—ab
treatment, [Gifford] *1537
treatment, operation to control, [Row] 1263—ab
GLENCLIFF Vitamin D Milk, 919
GLIOBLASTOMA multiforme, bilateral, [Taylor] 1485—ab
GLIOMA, 850
hereditary, of retina, 2040
GLOBIN: See Cerebrospinal Fluid
GLOMERULI: See under Kidney; Nephritis glomerular
GLOMUS tumor, [Adair] 710—ab
GLUCOSE: See Dextrose; Syrup (corn syrup)
GLUTEAL REGION, treatment of herpes, 1014
GLYCERIN as sclerosis inducing agent, 1173
Extract: See Suprarenals cortex
Therapy: See Kidneys, calculi; Ureter calculi
GLYCERYL Trinitrate: See Thrombosis, coronary
GLYCINE: See also Dystrophy, muscular; Muscles, disorders; Myasthenia gravis
action in schizophrenic patients, [Reid] 529—ab
effect on creatinuria in peripheral neuritis, [Allinson] 1735—ab
GLYCOCOLL: See Glycine
Test: See Liver function test
GLYCOGEN metabolism, system regulating, [Battistini] 1814—ab
storage disease (von Gierke's), heart enlargement due to, [Antopol] 1261—ab
GLYCOSURIA, Renal: See Diabetes, Renal
GNATHOSTOMIASIS, human, [Prommas] 142—ab
GODFREY'S Hair Dye: See Eyelash dye
GOITER: See also Goiter, Exophthalmic; Hyperthyroidism; Hypothyroidism
adenomatous (benign), [Bergstrand] 709—ab
American Association for Study of Goiter prize, 1863
biologic action of different types, [Kimura] 1996—ab
cytologic review, [Franck] 1268—ab
endemic, is Forest Park, Pa., in goiter belt? 1645
in children, of school colonies, 502
iodine metabolism (internal) and, [Scheffer] 1994—ab
metastasis (solitary) in retroperitoneal lymph node, [Doepfner] 1658—ab
struma lymphomatosa with hyperthyroidism, [Polowe] 2056—ab
surgical treatment, auricular fibrillation after, [Ernstene] 1261—ab
surgical treatment, tribrom-ethanol narcosis in, [Keynes] 141—ab
surgical treatment, wound closure in, [Capelle] 634—ab
treatment, organic iodine compound, [Misske] 453—ab

GOITER, EXOPHTHALMIC, blood oxygen in, [Rynearson] 1026—ab
thyrotoxic hypertension, [Parkinson] 2057—ab
GOLD Arsenic Treatment: See Lupus erythematosus
Fever Therapy: See Dementia Praecox
Medal Evaporated Milk, 919
Test: See Cerebrospinal Fluid
Thread Syrup Compound A, 204—BI
Treatment: See Snake bite
Tribromide: See Cough; Whooping Cough
GOLDEN Bear California Orange Juice, 839
Fruit Brand Lemon Juice, 755
Rule Bakery and Dairy Vitamin D Milk, 1623
GONADS, function and tuberculosis, [Neurath] 1578—ab
hypogonadism, androtin in, [McCullagh & Renshaw] *1140
internal secretions of, and gout, 1392
male, anterior pituitary lobe and, [Neumann] 147—ab
GONOCOCCUS, complement fixation test in gonorrheal arthritis, [Myers] 787—ab
cultivation [McLeod] 716—ab
culture medium for isolation "in vitro," [Castillo] 719—ab
vaccine preparation, technic, [Barringer] *1826
GONORRHEA: See also Arthritis
cervicitis, 1561
cervicovaginitis, lyzed gonococci in treatment, [Blatt] 1889—ab
chronic, in women, 777
complement deviation in, [Boncinelli] 1741—ab
complications, ocular, [Swab] 290—ab
diagnosis, 1170
diagnosis, complement fixation reaction (Gauran), [James] 718—ab; [Myers] 787—ab; [Brunet] 1651—ab
diagnosis, hemagglutination reaction, [Bachmann] 1107—ab
epididymitis, 1632
immunologic aspects, [Pelouze] *1819
infection, animal susceptibility to, 1399
postgonorrheal infections, 1327
prostatic abscess in 4 year old, [Fox] *748
prostatitis after, 1970
serum reaction in spinal fluid, [Gadrat] 791—ab
treatment, drugs, antigens based on laboratory study, [Herrold] *1821
treatment, gonococcic vaccine of low toxicity, [Price] 74—ab
treatment, in women, by concentrated fat free milk and manganese butyrate, 1727
treatment, vaccine and routine treatment in women, [Barringer] *1825
treatment, vaccine (living) intracutaneously, [Sommer] 1997—ab
urethral discharge (persistent) after, 1972
vaginitis in children, amniotin in, [Huberman & Israeloff] *18
vaginitis, in children, pyridium in, [Brown] 873—ab
GOOD Kind Pineapple, 1151
Morning Florida Grapefruit (hearts) 1229; (juice), 1709
Morning Florida Orange Juice, 1709
GOUT, internal secretions of sex glands and, 1392
effect of high fat diet on, [Lockie & Hubbard] 1883—ab
GRAAFIAN FOLLICLE, hormone, physiologic dose of, [Schoeller] 147—ab
GRADUATES, Foreign: See Licensure
increase, United States, *574
Internship and, *571; *572
statistics, *571; (1905-34) *593; *574
GRAFENBURG Ring: See Birth Control
GRAFFENBURG Dairy's Vitamin D Milk, 1151
GRAFT: See Bone; Nerves; Omentum; Skin; Tube; etc.
GRANGER Liver Regulator, 204—BI
Vegetable Teatonic, 697—BI
GRANITE quarriers, silicosis among, [Bloomfield] 297—ab
GRANTS: See under American Medical Association; National Research Council; Scholarship
GRANULOCYTOPENIA: See Angina, agranulocytic
GRANULOMA, coccidioidal, fungi of, [Benham] 1263—ab
intestinal, complicating amebiasis, [Lynch] *1149
GRAPE juice, effect on urinary excretion of citric acid, [Schuck] 374—ab
Sugar: See Dextrose
GRAPEFRUIT, California Fruit Growers Exchange advertising, 1379
Dr. P. Phillips, 839
Good Morning brand, (hearts) 1229; (juice), 1709
GRASSES, sensitivity to, 1012
GRAVITY: See Specific Gravity
GRAVY: See Mushroom
GREAT MEN, disease as mental stimulus, 1455—E
GREEN Coloring: See under Color
GRENFELL orphanage and school, 498
GRIMES, JOHN M., hospitalization of mentally ill, 1457—E
GRISWOLD'S Family Salve, 429—BI
GROIN, filariasis, [Young] 1655—ab
de GROSZ, EMILE, celebrate professorship of, 932
GROUP Hospitalization: See Hospitals
Practice: See Medicine
GROWTH: See also Bones; Dwarfism; Teeth; Tumor, transplanted; etc.
factor from anterior pituitary, [Wyeth] 772—C
Hormone: See Antuitrin-G
liver promoting property, [Johnson] 1408—ab
motion of, Wetzel on, 2030—E
retarded, underdevelopment as endocrine manifestation, 703
stimuli effect on thyroid tissue, [Silberberg] 1740—ab
thymus extract (Hanson) accelerates, [Rowntree & others] *1425
GUAIACOL carbonate, Duotal Tablets, 917
GUANIDINE in Blood: See Blood
intoxication, acidosis of, [Minot] 1985—ab
GUERNSEY Dairy Co. Vitamin D Milk, 2029
GUMS, treatment of gingivitis, 127
GUNSHOT Wound: See Wounds
GYNECOLOGISTS, American Association of, 688
GYNECOLOGY, convention at Salsomaggiore, 693
French Congress of, 55
hereditary factors in, Germany, 1005
infra-red ray treatment, [van Amstel] 80—ab
puerperal, 2030—E
surgery, phlebitis and embolism after, 1865
GYNERGEN, Ampules Gynergen Solution, 1708
GYPSUM industry, hazards, 62
peritoneal tissue response to, [Miller & others] *909; *911

H

HABIT spasm, pallalia in connection with, [Sheffield] 1968—C
HAIR: See also Alopecia; Barbers; Hirsutism
Angel's: See Glass, spun
Dye: See Eyelash dye
follicular lesions in vitamin A and C deficiencies, [Scheer] 1022—ab
industry, eye conditions of workers in, 1562
mercury impregnation effect on, 1399
Northwest Hair Clinic, judge dissolves, 350
permanent wave lotion, eyelid dermatitis from, [Rattner] *180
permanent waving effect on, 435
tonic (Kreml), eruption from quinine, [Ford] *483
HAKKA Cream Compound, 204—BI
HALIBUT liver oil, effect on common cold, [Shibley & Spies] *2021
HALIVER OIL, vitamin A and colds, [Gardner] 291—ab
HAMILTON Dairy Co. Vitamin D Milk, 1623
HAND: See also Fingers; Nails; Wrist; etc.
injuries from porcelain faucet handle, [Maloney] *1618
Ringworm of: See Ringworm
stiffening, treatment, [Lange] 381—ab
HANDICAPPED Children: See Children
HANDWRITING of criminals, 684—E
HANDY Brand Evaporated Milk, 111
HANOVIA Home Model Alpine Sun Lamp, 1229
HANSON Extract: See Thymus
HAPPY Home Brand Syrup, 260
HARDY'S Twin Loaf Bread, 1379
HARELIP, double, operation for, [Lee] 1736—ab
heredity in, 859
HARRIS Vitamin D Milk, 919
Yeast Vitamin Tablets and Brewer's Yeast, 1378
HARVARD University bans patents, 116
African Expedition, returns, 1860
Dr. Edsall retires as dean, 1861
HAT Cleaning: See Dry Cleaning
HAWAIIAN Pineapple: See Pineapple
HAY FEVER, blood sedimentation rate in, [Gelfand] 1486—ab
complicating pyrethrum sensitization, [Kampmeier] 202—C
curability, [Walker] 1099—ab
etiology, molds, [Prince] 1571—ab
nostrum, Clara Ross, Inc., 1873—BI
pollen extract injections, 60; 2038
pollens in New York, 63
research on, Chicago, 495
treatment, desensitization of nasal mucosa by ionization, [Warwick] 788—ab
treatment, intranasal cauterization, [Francis] 143—ab
treatment, nitrohydrochloric acid, 938; (reply) [Wood] 1647
treatment, perennial, 431
treatment, roentgen, [Schreus] 1339—ab
treatment, tonsils, [Rappaport] 1486—ab
HEAD: See also Brain; Cranium; Forehead; Hydrocephalus; Microcephalus; Scalp
Engaged: See Labor presentation
injury and posttraumatic neurosis, 346—E
HEADACHE: See also Migraine
after spinal anesthesia, [Zappalà] 720—ab
at menstrual periods and week ends, 776; 1399
blood pressure and temporal reflex, [Vermel] 79—ab
diagnostic types, 479—ab
HEADACHE—Continued
pituitary [Skipp] 1569—ab
powders, chronic acetphenetidin intoxication, [Holst] 1110—ab
HEALTH: See also Hygiene; Sanitation
award, Los Angeles County given, 1240
Center: See also Medical Center
center, East Harlem, accepted by New York City, 418
climate and, 683—E; 765
commissioner, term extended, Baltimore, 1714
contest, inter-chamber, 688
council established, District of Columbia, 613
county department discontinued, Alabama, 1954
day, state, Pennsylvania, 1460
Department: See also under Medicolegal Abstracts at end of letter M
department, vacancy, New York, 195
education (popular) books at public library, [Millman] 855—C
Examination: See Physical Examination
exhibit at Mid-South Fair, 497
guild, Austria, 1796
Insurance: See Insurance
Mental: See Mental Hygiene
ministry, status, France, 354
National Health Service (England): See Insurance, health
of Italian army, 503
of school children, Germany, 1246
officer, state, appointed, North Carolina, 1716
officers' meeting (Ohio) 1716; (Illinois) 1784
program for colored population, Illinois, 686
projects, CWA, 764
promoting hereditarily healthy families, Germany, 1721
Public Health Legislative Conference of Pennsylvania, 1076
public lectures on, by laymen prohibited, Austria, 357
public, relation to graduate instruction [Parkins] *545
public, service, India, 929
public, service, proposed radical changes, Bucarest, 2043
public, service reorganized, (Germany) 932; (Mexico) 1635
resorts, medical study trip sponsored by, 53
resorts, Saratoga Spa laboratory, 1075
rural, federal fund for, 1461
state, agency reorganized, Kentucky, 614
state director appointed, Ohio, 1862
state minister (Dr. Cilento) forecast for Queensland, 1869
survey (child), New Jersey, 845
survey in Montgomery County, Md., 496
survey of Negro children, East St. Louis, 1074
U. S. Public Health Service, 420; (new home) 1002; (changes) 1387; 1787; (internship) 1461
unit, Kellogg Foundation sponsors, 925
unit (model) discontinued, Anne Arundel County, Maryland, 416
unit, resolution on discontinuing Louisiana, 1241
unit resumes operation, Coffee County, Alabama, 843
HEARING: See also Deafness
devices in otosclerosis, 776
tests, Schwabach's compared with Becker's, [Becker] 787—ab
HEART: See also Arteries, coronary; Endocarditis; Pericarditis
Auricular Fibrillation: See Auricular Fibrillation
beat, duration of ventricular, systole, [Lian] 378—ab; (correction) 636—ab
beat, palpitation after procaine and epinephrine injections, 860
block, Adams-Stokes attacks, [Hill] 1811—ab
dilatation (traumatic) simulates hemopericardium, [Henschen] 635—ab
Disease: See also Cardiovascular Disease
disease among adolescent school children of New York City, [Goodman & Prescott] *157; 497
Disease, Arteriosclerotic: See Arteriosclerosis
disease, dyspnea in, [Meakins] *1444
disease, epigastric hernia simulating, [Kjærgaard] 1138—ab
disease, heredity, 1245
disease, mortality, challenge, [Stone] *151
disease (rheumatic) and periarteritis nodosa, [Friedberg] 1099—ab
disease (rheumatic), infection in, [Rothschild] 369—ab
disease, Scillonin, 1708; 1947
disease, symposium on, California, 1544; 1859
disease, thyroidectomy for, [Jensen] 287—ab; [Davis] 1805—ab
disease, tonsil operations on patients, 620
disorders of nurslings with dysentery, [Von Kiss] 1413—ab
Electrocardiogram: See also Heart infarction; Heart muscle
electrocardiogram, anoxemia effect on, [Katz] 1097—ab
electrocardiogram, coronary T wave in pericarditis, [Peel] 1991—ab
electrocardiogram in coronary occlusion complicated by pericarditis, [Barnes] 1097—ab

HEART—Continued
electrocardiogram, inversion of T wave in lead 3, [Clerc] 1492—ab
electrocardiogram, ST segment in acute rheumatic fever, [Easby] 868—ab
electrocardiogram, terminal deflection in, [Scherf] 1496—ab
electrocardiogram, toxic symptoms of methylene blue, [Nadler] 631—ab
electrocardiogram, ventricular deflection areas in, [Wilson] 1805—ab
electrocardiographic changes in angina pectoris, [Gray] 142—ab
electrocardiographic control of apparent death, [Bruns] 1186—ab
electrocardiography in hospital practice vs. private cardiologist, 1010 (reply) [Sussiln] 1728
electrocardiography, multiplane chest, [Weinstein] 441—ab
electrocardiography, precordial leads in, [Lian] 76—ab
enlargement, due to abnormal glycogen storage, [Antopol] 1261—ab
hormones for angina pectoris, [Lyter] 287—ab
in diabetes, [Klingenberg] 1032—ab
in myxedema, [Lerman] 868—ab
Infarction: See also Heart muscle
infarction effect on tolerance to digitalis, [Bellet] 1652—ab
infarction localized by electrocardiogram, [Katz] 1266—ab
infarction, research on, 356
inflammation (rheumatic carditis) in children, [Kaiser] *886
inflammation (rheumatic carditis), sedimentation rate in, [Perry] 1990—ab
insufficiency and quantity of blood, [Landau] 1338—ab
insufficiency, carcinomatous endarteritis ending in failure of ventricle, [Greenspan] 1652—ab
insufficiency, cerebrospinal and venous pressures in failure, [Friedfeld] 72—ab
insufficiency (chronic) and high oxygen atmospheres, [Richards] 951—ab
insufficiency, digitalis for failing heart, 624
insufficiency, indicating therapeutic abortion, [Pardee] *1899
insufficiency, output in relation to failure, [Harrison] 1099—ab
insufficiency, thyroidectomy in congestive failure, [Bremer] 1810—ab
insufficiency, treatment, 858
irregularities produced by ephedrine, [Meek] 525—ab
measurement of frontal silhouette, [Rona] 447—ab
muscle and creatine, 115—E
muscle changes in hypertension, [Levine] 1485—ab
muscle infarction, electrocardiogram in, [Wilson] 369—ab; [Winternitz] 369—ab
muscle, necrosis induced by orthophosphates, [McJunkin] 1983—ab
muscle, oxygen insufficiency as cause of angina pectoris, [von Bergmann] 1576—ab
muscle, sarcosporidia in premature infant, [Hertig] 292—ab
muscle, unidentified parasite in, [Von Glahn] 1885—ab
Output: See also Heart insufficiency
output, sudden occlusion of pulmonary artery effect on, [Moore] 1024—ab
pain and angina pectoris, 1171
rhythm (gallop), [Routier] 876—ab
roentgen kymography, 271
shifting electrical axis in artificial pneumothorax, [Treiger] 215—ab
sounds, murmurs, enlargement, etc., life expectancy with, [Viko] *554
sounds, recording, 426
sounds, tendinous fibers and, [Bondi] 1495—ab
Ventricular Fibrillation: See Ventricular Fibrillation
worms, 1728
HEAT: See also Temperature
Bougies: See Eustachian Tube obstruction
cramps, prostration, stroke, therapy, [Fantus] *990
exposure, salt tablets in drinking water supplies in, 1644
production and control in schizophrenic reaction, [Cameron] 1653—ab
production and growth, Wetzel on, 2030—E
production (total), importance of measuring, [Newburgh] 1981—ab
Radiant: See also Infra-Red Rays
radiant, Sollux Lamp, 339
regulation, infundibulum and tuber cinereum rôle in, 930
sensitiveness, 2048
stroke in children, 1163
Therapeutic Use: See also Short Waves
therapeutic use, Burdick Zoalite Lamps, 1855
Vestvold's Photo-Electric Dilator for applying by rectum, 992
wave brings high death rate, Missouri, 418
HEATH, C. J., death, 690
HEBE Evaporated Milk, 1539
HEBERDEN'S node, 1092
HEBREW: See also Jews
University, (cancer research) 197; (medical center and graduate medical school) 1161; (Society), 1628
HEEL Exercise: See Foot imbalance
HEGAR Dilators: See Uterus cervix
HEILKRAFT Chemical Co. Scarlet Red Salve, 205—BI; (Council report) 1778
HEMAGGLUTINATION Reaction: See Gonorrhea; Syphilis, serodiagnosis; Typhoid
HEMATEMESIS in hepatic tumors, [Beer] 880—ab
HEMATOMA after extracting tooth under local anesthesia, 857
traumatic subdural, pressure symptoms, [Zollinger & Gross] *245
HEMATOPOIESIS: See Blood formation
HEMATOPORPHYRIA, [Opsahl] 880—ab
HEMATOPORPHYRIN: See also Mental Disease treatment
[Aaron & Ayres] *1280
HEMOCHROMATOSIS and iron-copper metabolism, [Dry] 375—ab
HEMOGLOBIN Regeneration: See Anemia
HEMOGLOBINURIA, nocturnal, hemolytic anemia with, [Iglauer] 381—ab
HEMOGRAM: See Leukocytes count
HEMOPERICARDIUM, traumatic cardiac dilatation simulates, 635—ab
HEMOPHILIA, diagnosis, roentgen, [Rypins] 213—ab
treatment, [Jones & Tocantins] *1671
treatment, cevitamic acid, [Böger] 1494—ab
treatment, corpus luteum, 1795
HEMOPTYSIS: See also Tuberculosis, Pulmonary
treatment by hemostatics intratracheally, [Vaccarezza] 379—ab
HEMORRHAGE: See also Kidney; Peptic Ulcer; Tonsillectomy; Uterus hemorrhage; etc.; under Medicolegal Abstracts at end of letter M
arteriosclerosis with, 2049
control by cevitamic acid, [Böger] 1494—ab
control by sodium citrate, [Hutchison] 220—ab
control of rebellious, by x-ray, 1552
form of asphyxia, [Henderson] *837
in new-born, 1173
massive, from ulcers, prognosis, [Christiansen] 1818—ab
Occult: See Feces, blood in; Intestines; Stomach
Pericapillary: See Encephalitis, hemorrhagic
Puerperal: See Puerperium
Subdural: See Meninges
subperitoneal, tympany in, [Lenormant] 1185—ab
tendency to, in obstructive jaundice and cysteine, 994—E
HEMORRHOIDS, treatment, injection, 361; [Henninger] 1031—ab
treatment, obliteration with negative galvanism, [Keesey] 1486—ab
HEMOSTATICS: See Hemoptysis, treatment; Hemorrhage control; Scalp
HEMOTHERAPY: See also Blood Transfusion
autohemic injections in tuberculous iritis, 2040
autohemotherapy in depression, [Giehm] 453—ab
indication, [Hartmann] *1353
HENRY'S Reaction: See Malaria
HEPARIN, effect on epinephrine permeability of erythrocytes, [Kuczarow] 147—ab
HEPATITIS: See Liver inflammation
HEREDITY: See also Angioma; Blood groups; Blood Pressure, high; Diabetes Mellitus; Gastro-Intestinal Tract; Harelip; Jaundice, hemolytic; Leukoderma; Tuberculosis; etc.
Congress of Internal Medicine discusses, 121
environment and, effect on twins, 1721
promoting hereditarily healthy families, Germany, 1721
research institute, Netherlands, 426
HERNIA: See also under Medicolegal Abstracts at end of letter M
epigastric, simulating heart disease, [Nordentoft] 1188—ab
inguinal, impotence after injection for, 1561
intestinal rupture in, without incarceration, [Rørig] 536—ab
into umbilical cord, containing entire liver and gallbladder, [Niebuhr & others] *16
HERPES, gluteal, treatment, 1014
immunity, leukocytes in, [Jamuni] 217—ab
progenitalis, 1561
simplex (recurrent), differential diagnosis, 207
viruses isolated from epidemic encephalitis, [Neal] *727
zoster acutus, diagnosis, [Fenton] *468
zoster, pain, pituitary solution for, [Gillett] 1105—ab
zoster relation to varicella, [Amies] 1891—ab
HERRMANN Treatment: See Blood Vessels, disease; Endarteritis
HERSHEY Syrup Genuine Chocolate Flavor, 918
HERST'S Intestinal Cleanser, 204—BI
HESTER, CHARLES F., 1242
HETEROCODEINE: See Codeine
HETEROPHILE Antibody Test: See Leukemia
HEUSER, CARLOS, death, 197; 426
HEXYLRESORCINOL: See Ascariasis; Hookworm Infestation; Oxyuris vermicularis
HIDRADENOMA of vulva, [Eichenberg] 1744—ab
HIGH BLOOD PRESSURE: See Blood Pressure
HIGH FREQUENCY CURRENTS: See Diathermy
HIGH UP BRAND Syrup, 413; 1069
HIGHLAND 100% Pure Vermont Maple Sap Syrup, 1949
HIP JOINT: See also Groin; Pelvis
dislocation (congenital), plastic repair, [Spitzy] 148—ab
fracture, skeletal fixation for, [Moore] 1738—ab
polyarthritis involving, [Kienböck] 792—ab
tuberculosis, fusion operation for, [Hallock & Toumey] *1836
HIPPURAN, N. N. R., 412
HIRSCHSPRUNG'S DISEASE: See Colon, megacolon
HISTUTISM in female, ovarian hormone for, 353
HISTAMINE blister evolution, hormones and mercurial diuretics effect on, [Steffanutti] 1574—ab
flare area, arteriosclerosis effect on, [Ernstene] 292—ab
gastric juice stimulated by, [Martin] 712—ab
in inflammation, [Morgan] 1888—ab
Iontophoresis, [Käppeli] 76—ab; [Doane] 1983—ab
like action of tomatoes, [Gleichmann] 1267—ab
lung function tested by, [Heymer] 1577—ab
Treatment: See Arthritis; Myositis; Rheumatism
HISTIDINE Therapy: See Peptic Ulcer
HISTOLOGY: See also Cells; Kidney; Knee; Tissues
technic, invention, 1583—ab
HITLER: See under Germany
HODGKIN'S Disease: See Lymphogranuloma
HOLOCAINE Solution, N. N. R., 1708
HOMICIDE: See Murder
HOMOGENIZED Milk: See under Milk
HONEY, American Honey Institute advertising, 918
Dew Brand Pineapple, 1069
in diabetes mellitus treatment, 861
HONOLULU County Medical Society, 1717
HOOKWORM INFESTATION anemia, treatment, [Rhoads] 1567—ab
eradication, South African mines, 499
prophylaxis, Italy, 1081
survey, South Carolina, 615
symptoms of duodenal ulcer in, [Gibbes] 140—ab
treatment, tetrachloro-ethylene and hexylresorcinol, [Brown] *653
HOPKINS, FREDERICK (Sir), honored, 500
HORLICK'S Malted Milk Lunch Tablets, 1379
HORMONES: See also Graafian Follicle; Heart; Ovary; Pituitary Body; Suprarenals; etc.
action on evolution of histamine blister, [Steffanutti] 1574—ab
antihormones, 492—E; 1456—E
Estrual: See Estrin
Growth: See Antuitrin-G
nomenclature of glandular products, 1152—E
resistance of thyroid to, 1456—E
Sex: See Sex
HORN, Cow's: See Fractures, treatment
HORNER'S SYNDROME in superior pulmonary sulcus tumor, [Jacox] *84
HOSPITALS: See also Clinics; Tuberculosis sanatorium; etc.; under Medicolegal Abstracts at end of letter M
A. M. A. resolution on employing optometrists, 35
A. M. A. resolution on exploiting radiologists, 45
A. M. A. resolution on ophthalmic service in, 1544
A. M. A. resolution on survey of radiologic departments, 45
abandons laboratory "practice of medicine," George Washington U., 1544
American influence (early) on, Japan, 1322
American, Neuilly, 849
approved by A. M. A., *588; *595; *597; 1476
bequests and donations, 52; 352; 616; 928; 1001; 1386
books given to Indianapolis Methodist Episcopal, 417
British, British equipment for, 765
Canadian provincial, changes, 1317
cancer committees, Salt Lake City, 1862
charity, pay patients in, France, 1633
city, capacity taxed, New York City, 1075
Civil War, site marked, Richmond, 268
Cook County, therapy, [Fantus] (conjunctivitis) *23, (comment) [Fridenberg] 430—C; (accidental wounds) *108; (erysipelas) *183; (reply, measuring prescriptions) 282; (furunculosis) *411; (fever) *484; (barbiturate poisoning) *749; (mycoses) *832; (anthrax) *915; (heat cramps, stroke) *990; (carbuncle) *1066; (eczema) *1305; (discussion of previous articles) *1375; (burns) *1446; (glaucoma) *1537; (chancroid, bubo) *1853; (pain) *1939
crusade against venereal disease, 424

V 19

HOSPITALS—Continued
electrocardiography by, 1010; (reply) [Sussllin] 1728
facilities of medical schools, *577
finance, change in, Birmingham, England, 1788
financing by lottery racket, Australia, 1007
financing by sweepstakes, Ireland, 353
formulary (standard) adopted, New York City, 1955
group plan among voluntary hospitals, New York, 267
Guy's, clinical research, 1549
Hospital for Joint Diseases, appointments available, New York City, 1546
insurance, Richmond Academy approves report, 52
International Congress of (third), 424
Internships: See Internships
Jewish General, of Montreal dedicated, 1958
Mexican, modernization of, 1636
Middlesex, clinical research unit, 197
municipal, cooperation with medical schools, England, 617
New York Graduate and Stuyvesant join forces, 845
Obstetric Society of Ohio, 763
occupancy, survey, Wisconsin, 52
Outpatients: See Outpatients
pathologist (full-time) function in, [Alter] *1189
Philadelphia General, wards named for staff, 1630
physicians, promotion, Buenos Aires, 426
planning board established, New York City, 1242
Prussian, statistics, 1165
psychiatric, guest home for psychoneurotic patients, 1785
psychiatric, hospitalization of the mentally ill, 1457—E
psychiatric, new institutes, Genoa, 693
records, new forms for, 1717
Roosevelt on responsibility for care of sick, 1953—ME
service increased: United Hospital Fund study, New York City, 1629
Sollux Radiant Heat Lamp model for, 339
staffs, payment, Cape Town, 852; 1962
state, opens new unit, Massachusetts, 1459
study, Russia, 350
tax on carbon arc lamps used in, 198
taxation protested, New York City, 1785
Toronto General, given gift for convalescent home, 1958
Veterans: See Veterans
voluntary and municipal, London, 119; 1319
voluntary, give 40% care, New York, 1459
wards, Streptococcus hemolyticus in children's throats, [Burgin] 1024—ab
HOUSING, survey of slum areas, New York City, 926
HOWE, LUCIEN, collection of photographs of ophthalmologists, 1784
HUERTAS, FRANCISCO, death, 1392
HUNTING Dairy Co, Vitamin D Milk, 1709
HURON Brand Evaporated Milk, 111
HUTCHISON'S Big Head Liniment, 205—BI
Magic Oil, 205—BI
HYDATID Cysts (echinococcosis): See Brain; Liver; Lungs
HYDATIDIFORM Mole: See Uterus
HYDRAMNION: See Amnion
HYDRANTS: See Faucets
HYDRAS, 204—BI
HYDROA estivale, actinic, [Anderson & Ayres] *1283
HYDROCARBON Poisoning: See Gasoline; Kerosene
HYDROCELE, abdominoscrotal, [Roller] *671
treatment, injection, 281; (reply) [Ewell] 1175
treatment, injection of quinine-urea solution (Vendel's), [Blavier] 222—ab; 1972
HYDROCEPHALUS, treatment, endoscopic coagulation of choroid plexus, [Putnam] 526—ab
HYDROGEN ION Concentration: See also Blood; Cerebrospinal Fluid; Umbilical Cord
determination, colorimetric, [Symons] 1993—ab
HYDROLABILITY: See Water metabolism
HYDROMETRA after intra-uterine radium irradiation, [Vogt] 1495—ab
H'PEREMESIS gravidarum: See Pregnancy, vomiting of
HYPERGUANIDINEMIA: See Blood
HYPERINSULINISM: See Pancreas secretion
HYPERKERATOSIS subungualis, 1562
HYPERPARATHYROIDISM: See Parathyroid
HYPERPITUITARISM: See Pituitary Body
HYPERPYREXIA: See Fever, therapeutic; Temperature, Body, high
HYPERSENSITIVITY: See Anaphylaxis and Allergy; Asthma; Rhinitis
HYPERSUPRARENALISM: See Suprarenals
HYPERTENSION: See Blood Pressure, high
HYPERTHERM, Kettering, for inducing fever, 1381—E
HYPERTHYROIDISM, copper effect on, [Meyer] 1030—ab
diabetes mellitus and, [Hills] 1486—ab
hyperpituitarism coexisting in, 1389
in children, [Jones] *914
HYPERTHYROIDISM—Continued
in pregnancy, 1970
struma lymphomatosa with, [Polowe] 2056—ab
treatment, [Mastin] 289—ab
treatment, roentgen, [Petrás] 225—ab
HYPERTONIC Solutions: See Epilepsy treatment; Sodium chloride; etc.
HYPERTROPHY: See Breast; Heart; Prostate; etc.
HYPERVENTILATION: See Respiration
HYPOCHLORITE, Sodium: See Wound irrigation
HYPOGLYCEMIA: See Blood sugar; Diabetes Mellitus
HYPOGONADISM: See Gonads
HYPOPHONESIS: See Spine
HYPOPHYSINE: See Pituitary Extract
HYPOPHYSIS: See Pituitary Body
HYPOPITUITARISM: See Pituitary Body
HYPOTENSION: See Blood Pressure, low
HYPOTHALAMUS: See also Infundibulo-Tuberian Syndrome
relation to carbohydrate metabolism, [Davis] 1887—ab
syndromes, rôle of hypophysis in, 930
HYPOTHYROIDISM, Iodine tolerance test, [Elmer] 969—ab
HYSTERECTOMY: See Uterus cancer

I

I. G. A. Strained Products, 111
ICTERUS: See Jaundice
Index: See Blood bilirubin
IDIOCY, amaurotic family, 774
Mongolian, etiology, [Rosanoff] 1805—ab
IDIOSYNCRASY: See Anaphylaxis and Allergy; under Medicolegal Abstracts at end of letter M
ILEITIS, regional (terminal); roentgen diagnosis, [Kantor] *2016
ILLINOIS Valley Vitamin D Milk, 993
ILLUSTRATION, photographic, in medicine, [Creer] 1325—C
IMMUNITY: See Herpes; Streptococcus; Tuberculosis; Viremia; Undulant Fever; etc.
IMMUNIZATION: See also Pneumococcus; Scarlet Fever; Tuberculosis; Vaccination
bacteriophage, [Eaton & Bayne-Jones] *1836
simultaneous, against diphtheria, typhoid and smallpox, 63; [McKean] 277—C; (order) 1091
IMMUNOGENS (P. D. & Co.), reaction to, 939
IMMUNOTRANSFUSION: See Blood Transfusion
IMPETIGO, 1646
contagiosa, metaphen-collodion mixture for, [Hollander] 945—ab
contagiosa neonatorum, "dry method" treatment, [Levin] 1569—ab
nephritis complicating, [Sutton] 1183—ab
IMPOSTOR: See also under names of specific individuals
jailed, 352
IMPOTENCE after hernia injection, 1561
potency and single testicle, 626
spinal cord injury and, 1092
IMPREGNATION, artificial, 432; (reply) [Huhner] 940
artificial, in sterility after 2 abortions, 1089
IMRAS Treatment: See Retinitis, pigmentosa
INCEST, during postwar period, Germany, 931
INCUBATION Period: See Rabies
INDEX Brand Syrup, 564
INDIAN New Discovery, 205—BI
Operation: See Cataract
Service physicians, Arizona, 1239
INDIANA, in morbidity reporting area, 999
University medical museum, 1458
INDO-VIN, 1873—BI
INDUSTRIAL: See also Insurance; Office buildings; Workmen's Compensation Acts
accidents, in mines, prevention, England, 119
accidents, International Congress on Diseases and (seventh), 1077
accidents, report, England, 689
accidents, traumatic subdural hematoma, [Zollinger & Gross] *245
dangers of sewers, 928
deafness caused by pneumatic drills, 929
death rates, U. S., 846
Depression: See Economics
dermatitis, exfoliative, 1012
dermatitis from formaldehyde, 433
dermatitis from glass wool, 1644
dermatitis from silk, 939
Disability: See Disability
disease, acne of exposure to chlorine: Acoclor-1169, 1089
disease, anthrax in brush factory worker, 351
disease, bakers' eczema, [Zlitzke] 787—ab
disease, cotton spinners' cancer, 1959
disease, diphtheria in silk worm workers, Japan, 769
disease, eye conditions in hair industry workers, 1562
disease, furunculosis in workers in lead-silver mine, 2050
disease, insurance against, Italy, 694
disease of sulphur mine workers, 1963
disease, papulopustular eruption in coal miners, [Dowling] 141—ab
INDUSTRIAL—Continued
disease, silicosis in granite quarriers, [Bloomfield] 297—ab
disease, silicosis or pulmonary fibrosis, 1472
disease, vertigo from handy repair cement, 281
disease, welder's conjunctivitis, 512
dusty trades, new regulations, England, 1244
examination of substandard workers, 116
group practice, successful, [Bloom] 1155—ME
hazard, alum and borax, 1971
hazard, aluminum paint, 128
hazard, bakelite dust, 280
hazard, carbon tetrachloride, [Davis] *962; (correction) 1787
hazard, cement, plaster and gypsum industry, 62
hazard, chloroform and oronite in dry cleaning, 624
hazard, hat cleaning, 1013
hazard, manufacture of explosives, 434
hazard, mercury poisoning in laboratory worker, 1255
hazard, silica, in soap factories, 778
hazard, water softener manufacture, 1726
hazard, welding, 129
heat exposure, salt tablets in drinking water, 1644
medical service, flat fees in, [Nordholz] 1641—C; 1863
poisoning, benzene, 355; (in painter) 1558
poisoning, carbon black, dangers, 2048
poisoning, carbon disulphide, 433
poisoning, chronic manganese, [Canavan] 1484—ab
poisoning, dibutyl phthalate, 860
poisoning, sulphur dioxide and bronchiectasis in refrigerator service man, 362
protection of workers, Austria, 357
protection of x-ray and radium workers, 1548; 2038
sarcoma of uveal tract after trauma, [Stieren] *311
work, effects on women, 689
INFANTS: See also Children; Infants, Newborn; under names of specific diseases as Diarrhea; Eczema; Tuberculosis; etc.
brachial plexus injury, 857
feeding, Alpha-Lac, 189
feeding, Beech-Nut Oatmeal Cere-Jel, 29
feeding, breast and artificial, [Grulee & others] *735; [Glazier] 1395—C; [Grulee] 1395—C; [Levy] 1725—C; [Sanford] 2046—C
feeding, Du Barry's Food, 111
feeding fruit juices, tetany after, [Bäumler] 1493—ab
feeding, Macy's Baby Foods, 1453
feeding, Mead's Dextri-Maltose with Vitamin B, 260
feeding, sour and dry milks in, [Feer] 145—ab
feeding, Stokely's for Baby (spinach) 29; (tomatoes) 110; (carrots) 189
feeding, strained products, Red and White Brand; White Swan, 919
feeding, strained products, various brands, 111
feeding, vitamin research in, 620
hydrolability in early infancy, [Burghi] 378—ab
mortality, decline, Germany, 620
mortality, England, 198
mortality, factors in, [Levy] 1725—C; [Sanford] 2046—C
mortality in eclamptic patients, [McNelle] *552
mortality in 1933, U. S., 1856—E
mortality of male new-born and under 1 year, 1390
mortality of premature, reduction, [Clifford] 1024—ab; *1117
mortality, prenatal care relation to, [De-Normandie] 1809—ab
mortality rate and birth rate, Japan, 1322
Premature: See also Infants, mortality
premature, sarcosporidia in myocardium, [Hertig] 292—ab
toxicosis (alimentary) intravenous drop infusions for, [Schmiedeberg] 535—ab
toxicosis, pathogenesis, therapy, [Csapó] 534—ab
toxicosis, size of liver in, [Szász] 305—ab
Vomiting in: See Vomiting
INFANTS, NEW-BORN: See also Embryology; Fetus
Asphyxia of: See Asphyxia
bleeding in, 1173; 1970
blood fibrinogen in, [Naeslund] 724—ab
blood pressure high in, 126
blood sedimentation reaction in, [Ellenberg] 444—ab
bones of, [Toverud] 536—ab
cerebral injury, calcium therapy, [Shannon] 1482—ab
erythroblastosis, treatment, [Arnold] 446—ab
impetigo contagiosa, "dry method" for, [Levin] 1569—ab
Jaundice of: See Jaundice
sequels of those born during tribrom-ethanol anesthesia, [Wahl] 223—ab
vaccination in, study, [Donnally & Nicholson] *1269
vaginal bleeding in, 1970
weight, preventing initial loss, [Halpern] 871—ab
INFARCTION: See Heart

INFECTION: See also Arthritis, infectious; Gonorrhea; Heart disease, rheumatic; Puerperal Infection; Staphylococcus; Streptococcus; etc.
avitaminosis effect on, [Takahashi] 1996—ab
chronic, rôle in lymphoblastoma, [Desjardins] ★1933
edema and, [Busson] 1108—ab
focal, and arthritis, [Steindler] 1732—ab
Hodgkin's disease, neoplasm or, [Krumbhaar] 1979—ab
latent, problem of, E—1951
mixed, in pneumococcic pneumonia, [Finland] ★1681
of physician, measles, compensation allowed, 502
pyogenic, suprarenal cortex extract in, [Wenner] 947—ab
resistance to, and nutrition, 994—E
serologic study of streptolysins, [Todd] 1739—ab
treatment, animal charcoal intravenously in, [St. Jacques] 948—ab
treatment, bacteriophage, [Eaton & Bayne-Jones] ★1769; 1780—E; ★1847; ★1934
treatment, intravenous continuous drop infusion in, [Kerner] 1110—ab
INFECTIOUS DISEASES: See also Diphtheria; Scarlet Fever; Whooping Cough; etc.
Immunization: See Immunization
in Spain, 1391
may be contracted a number of times and finally immunity is established, 861
mortality, England, 1388
of childhood, trend, 682—E
regulations in relation to aviation, England, 1244
INFLAMMATION: See also Bladder; Breast; Eyes; Gallbladder; Heart; Intestines; Stomach, etc.
histamine in, [Morgan] 1888—ab
INFLUENZA, adenopathies after, [Ruelle] 144—ab
epidemic (Puerto Rico) 688; (Maryland) 762
herpes progenitalis after, 1561
maternal, encephalitis in child after, [Stewart] 1735—ab
nostrum, Tablets Flu-Enza, 429—BI
review of literature, [Thomson] 298—ab
streptococcus vaccine in prevention and treatment, [Rosenow] 217—ab
viruses, susceptibility of mice to, [Andrewes] 1995—ab
INFRA-RED RAYS, Burdick Dual Zoalite, 339
Burdick Zoalite Lamp (Z-30; Z-12), 1855
sources, [Coblentz] ★183; ★254; [Laurens] ★1447
treatment in gynecology, [van Amstel] 80—ab
treatment, what can practitioner expect from, 27
INFUNDIBULO TUBERIAN syndrome, [Lhermitte] 145—ab
INFUNDIBULUM, heat regulation by, 930
INGRAM, DAVID, 1470—BI
INHALATION: See Oxygen; Pneumococcus
INHALATOR, Davis, 1946
INJECTIONS: See also under names of specific substances
Intraspinal: See Alcohol
Intratracheal: See Hemoptysis
intravenous continuous drop infusion in sepsis, [Kerner] 1110—ab
intravenous drip, [Dutton] 1251—C
intravenous drop in alimentary intoxication, [Schmiedeberg] 535—ab
intravenous, hyperpyrexia after, [Banks] 135—ab
intravenous therapy and venoclysis, [Hendon] 1641—C
parenteral fluid administration, [Hartmann] ★1349
INJURIES: See Brain; Foot; Hand; Trauma; etc.; under Medicolegal Abstracts at end of letter M
INSANITY: See also under Medicolegal Abstracts at end of letter M
manic-depressive, encephalography in, [Moore] 293—ab
INSECTICIDE, paradichlorbenzene, injurious to breathe air containing, 1174
poisons found in, [Aikman] ★641
pyrethrum sensitization complicating hay fever, [Kampmeier] 205—C
INSECTS: See also Bee; Flies; Mosquitoes
dust, allergic response to, [Randolph] ★560
INSEMINATION: See Impregnation
INSPIRATION: See Respiration
INSTITUTE: See also American Honey Institute; Bacteriology; Cancer; Criminology; Hospitals, psychiatric; Radiology; etc.
for Juvenile Research, 1315
for Research on Heredity, Netherlands, 426
of Experimental Medicine moved to Moscow, 769
of Legal Medicine at Lille, 271
of Parasitology at McGill, 1001
on Cardiovascular Disease, Cincinnati, 1160
INSTRUMENTS: See also Apparatus; Aspirator; Diathermy, scissors; needles
for hemostasis of scalp, [Bailey] ★562
surgical, taxation, England, 1003
used in orthoptic training, compared, [Guibor] ★916
INSULIN destroying power of erythrocytes, [Rosenthal] 1108—ab
duty on, repeal, England, 55
in Blood: See Blood
injection in tonsil cancer, 702
injection, plasma cholesterol response to, [Bruger] 71—ab
resorption, method for retarding, [Thiel] 452—ab
Stearns, 100 Units, 10 cc., 1947
Treatment: See Diabetes Mellitus; Fistula, postoperative
INSURANCE: See also Workmen's Compensation Acts; under Medicolegal Abstracts at end of letter M
accident, Lumbermens Mutual Casualty Company, [Nordholt] 1641—C; 1863
health, American Association for Labor Legislation want immediate action, 1858—E
health, California Medical Association committee to study, 193
health, Conference on Economic Security, 1624—E; 1627
health, Germany, 501; 1463
health, Medical and Surgical Association of Southwest opposes, 1863
health, National Health Service report, England, 1462
health, national, Japan, 769
health, opposed, New Hampshire, 1629
health, societies, Spain, 1392
Hospital: See Hospitals
life, companies and physicians, Japan, 1322
life, International Congress on Life Assurance Medicine, 1718
social, administration studies, 609—E; 1624—E
social, is it a success? France, 1789
social, Krankenkassen, Germany, 767; 1634
social, law, unpopular, France, 1865
unemployment, Conference on Economic Security, 1543
INTERMITTENT Negative Pressure: See Endarteritis
INTERNAL MEDICINE, Congress of, Germany, 121
Texas Club of, Mexico City, 1636
INTERNAL SECRETION: See Endocrines
INTERNATIONAL: For Societies whose names begin with "International" see also under Societies at end of letter S
Antirheumatic Congress (fourth), 768; 1081
Bureau of Bibliography of Military Medicine, 1005
center for study of leprosy, 692
committee for standardization of methods in anthropology and eugenics, 1081
Conference on Chronic Rheumatism, 1079
Conference on Vitamin Standardization, 353
Congress of Neurologists (fourteenth), 930
Congress of Radiology, fifth, A. M. A. resolution on inviting, 45; 1243
Congress of Radiology (officers), 1243
Congress of Veterinarians, 196
Congress on Dermatology, A. M. A. representatives, 40
Congress on Electro-Radio-Biology (first), 53; 498
Congress on Gastro-Enterology (first), 1957
Congress on Industrial Accidents and Diseases (seventh), 1077
Congress on Life Assurance Medicine, 1718
Congress on Tropical Medicine (ninth), 616
Dairy Co. Vitamin D Milk, 1709
Foundation of Gynecology and Obstetrics, 1002
Midwives Union (sixth congress), 199
Neurologic Congress (second) in 1935, 1002
Office of Documentation for Military Medicine, 197
pharmacopeia needed, 847
Red Cross Congress, Tokyo, 202
sanitary control of aerial navigation, 1244
Society of Geographic Pathology, 197
INTERNS, Council of Greater New York organized, 351
INTERNSHIPS, dictaphone and competitive examinations, France, 849
hospitals approved for, by A. M. A., ★579; ★588; ★595; 1476
in public health service, 1461
medical graduation and, ★571; ★572
medical students serving, as prerequisite for graduation, ★571; ★572
required by licensing boards and by medical schools, ★571; ★572
INTERVERTEBRAL DISKS: See Spine
INTESTINES: See also Cecum; Colon; Gastrointestinal Tract; Rectum; etc.
agglutinin response to antienterica vaccination, [Stuart] 1739—ab
Amebic Infection: See Amebiasis
anastomosis (aseptic) with ureter, [Higgins] 295—ab
anastomosis of intrahepatic bile duct with, [Gohrbandt] 1575—ab
atony of small, in hepatobiliary disorders, [Bayer] 1414—ab
bilirubin fate in small, [Sackey] 870—ab
blood circulation, gallbladder as regulator, [Heckmann] 223—ab
chromaffin glands, [Zanardi] 1741—ab
complications of pelvic irradiation, [Jones] ★1678
INTESTINES—Continued
disease, bacteriophage therapy, [Eaton & Bayne-Jones] ★1850
disease, paracolon bacilli in, of children, [Hassmann] 1817—ab
disorders in children, etiology, [Hassmann] 886—ab
Distention: See Flatulence
diverticulum, Meckel's, omphalomesenteric vestiges in, 1164
effects of diverting gastric contents to lower levels of, [McMaster] 70—ab
Fistula: See Fistula
Gaseous Distention: See Flatulence
hemorrhage (occult) from, [Hulst] 453—ab
Inflammation: See also Ileitis; Intestines, tumors
inflammation (cicatrizing), [Donchess] 711—ab
Invagination: See Intussusception
mucosa (heterotopic), factor in gastric ulcer, [Clar] 1339—ab; 1380—E
obstruction, [Meyer] 784—ab
obstruction, high, causes of death in, [Schnohr] 724—ab
occlusion, death from, [Chiariello] 635—ab
Parasites: See also Hookworm Infestation; Lambliasis; Tapeworm Infestation
parasites, anthelmintic properties of Vernonia anthelmintica, [Chopra] 1027—ab
parasitic worms in U. S., diagnosis; treatment, [Brown] ★651
peristalsis and antiperistalsis, examination for, [Burger] 1895—ab
peristalsis, observations, [White] 136—ab
rupture in hernia without incarceration, [Røvig] 536—ab
tuberculosis, [Boles & Gershon-Cohen] ★1841
tumor, lipoma, intussusception from, [Poston] 875—ab
tumors, fibromas of small, with intussusception, [Smith] 286—ab
tumors, nonspecific inflammatory, [Anschütz] 953—ab
INTRACRANIAL PRESSURE: See also Cerebrospinal Fluid pressure
high, and vestibular disorders, [Barré] 1893—ab
increased, in traumatic subdural hematoma, [Zollinger & Gross] ★245
INTRADERMAL Reaction: See Leprosy
INTRAVENOUS Drip; Therapy: See Injections
Urography: See Urography
INTUSSUSCEPTION caused by lipoma, [Poston] 875—ab
fibromas of small intestine with, [Smith] 286—ab
in infant, diagnosis, treatment, [Pouliquen] 1574—ab
INVAGINATION: See Intussusception
IODIDE, Ferrous: See Iron
sodium, intravenously and sinus drainage, 1171
Treatment: See Syphilis
IODINE: See also Kidney function test
compound solution, effect on basal metabolic rate, 282
effect on compensatory thyroid hypertrophy, [Hoshiko] 1496—ab
in Blood: See Blood
in Urine: See Urine
metabolism (internal) and goiter, [Scheffer] 1994—ab
staining, aid in diagnosing fresh amebas, [Magath] ★1221
Tolerance Test: See Blood; Thyroid insufficiency
Treatment: See Goiter; Hyperthyroidism
IODIZED oil, use in common duct obstruction, [Thorlakson] 1408—ab
salt, Diamond Crystal, 29
*ortho*IODOXYBENZOATE, Calcium: See Arthritis, treatment
idiosyncrasy and agranulocytic angina, [Fitz-Hugh] 1099—ab
IONIZATION, Copper: See Leukorrhea of nasal mucosa, [Warwick] 788—ab; 861
IONTOPHORESIS: See Arthritis, treatment; Histamine
IOWA Maid Strained Products, 111
IPRAL, sodium (Sodipral), safe premedicant for operations, [Gwathmey] ★1536
IRIS, retarded contractions in mental patients, 618
IRITIS, syphilitic, 1878
tuberculous, autohemic injections into anterior chamber, 2040
IRON, copper retention in children, 1154—E
deficiency anemias, diagnosis and treatment, [Bethell & others] ★787
ferrous iodide, does Syrup of Cupriferrum (Squibb) hurt the teeth? 282
metabolism and hemochromatosis, [Dry] 375—ab
Treatment: See under Anemia
IRRIGATION: See Throat
ISCHEMIA, effect on tumor development, [Orr] 74—ab
ISO-ANAPHYLAXIS: See Anaphylaxis and Allergy
ISOHEMO-AGGLUTINATION: See Blood groups

ITALIAN Army: See Army
Surgical Society, 694
ITCHING: See Ear; Pruritus; etc.

J

JACK, Automobile: See Automobile
JACKET, Radium: See Breast cancer
JACOB Mushrooms, 838
JAPAN, early American influence in, 1322
JAROTSKI Diet: See Peptic Ulcer, treatment
JAUNDICE caused by trauma during pregnancy? 62
chronic, surgical treatment, [Denk] 1817—ab
etiology, dinitrophenol poisoning, [Sidel] *254
hemolytic, chronic, liver extract for, [Reifenstein & Allen] *1668
hemolytic, symptomatology and heredity, [Hansen] 1576—ab
obstructive, blood phosphatase in, [Armstrong] 632—ab
obstructive, cysteine and tendency to hemorrhage in, 994—E
of new-born, familial, 62
pruritus, 2047
spirochetal, reports of Weil's disease, 502
spirochetal, Weil's disease, epidemic in North Queensland, 1869
spirochetal, Weil's disease in Dutch East Indies, 851
spirochetal, Weil's disease in sewer workers, 493—E
study of 100 cases; galactose tolerance, [Schiff & Senior] *1924
JAWS, fractures, treatment, [Curtis] 60—C
osteomyelitis of mandible, treatment, [Miltner] 950—ab
JEJUNAL TUBE, treatment by, in gastric ulcer, [Miaske] 879—ab; [Frölich] 1894—ab
JELKE'S Good Luck Vegetable Oleomargarine, 260
JERSEY Milk Co. Vitamin D Milk, 1623
JEWEL Blue Rose Rice, 1379
Cocoa, 1379
JEWELER'S rouge or ferric oxide, peritoneal tissue response to, [Miller & others] *910; *911
JEWS: See also Hebrew University
diabetes mellitus in, 1246
Hitler's persecution (refugees in England), 54; 689; 1864; (panel physicians) 692
population composition in Vienna from anthropology standpoint, 356
JOINTS: See also Arthritis; Elbow; Hip Joint; Pelvis
ankylosed, treatment, 1561
Clutton's: See Synovitis
JONES Motor-Basal Apparatus on, 1620
JONES, ROBERT (Sir), memorial, 618
JOURNALS, A. M. A. Board deprecates physicians serving on advisory boards, 1239
Consumers' Guide on milk production and consumption, 841—E
Japan Medical World, 1166
Journal of American Dietetic Association, 190—E
Journal of Kansas Medical Society, 925; 1315
Medical Economics, 1237—E
Modern Medicine, 1237—E
photographic illustration, in, [Creer] 1325—C
Quarterly Scientific Journal, 1962
Sibiul medical, 425
Skyscraper Management on socialized medicine, 1953
Starry Cross, misrepresents JOURNAL editorial, 612—E
throw-away, 1237—E
JULY FOURTH: See Fireworks
JURISPRUDENCE, MEDICAL: See Medical Jurisprudence

K

KA-DI-OK Compound, 429—BI
KAHLER'S DISEASE, 1049—ab
KAHN TEST in mental disease, 768
interpretation, 129
KALA-AZAR: See Leishmaniosis
KAPELLER-ADLER Reaction: See Pregnancy diagnosis
KATO, NAOJIRO, physician to Admiral Togo, 770
KELLOGG Foundation: See Foundations
Whole Wheat Biscuit, 839
KELPE'KOE, 1639—BI
KENNEDY, A. A., unauthorized solicitor, 616
KENNETT Mushrooms, 1709
KERATITIS, interstitial, [Klauder & Robertson] *236
KERATOPLASTY, [Castroviejo] 1980—ab
KERATOSIS: See also Hyperkeratosis
arsenical, [Franseen] 1885—ab
labialis, [Sturgis] 140—ab
KEROSENE poisoning in children, [Nunn & Martin] *472
KETOGENIC Diet: See Asthma treatment; Pyuria; Urinary Tract infection
KETONEMIA: See Blood
KETONURIA: See Urine
KETOSIS: See Acidosis
KETTERING hyperthermia for inducing fever, 1381—E
KETTLE: See Aluminum
KEYSTONE Brand Evaporated Milk, 111; 342; 413
KHAT habit among Orientals, 61
KIDNEY: See also Urinary Tract
blood flow through, 129; 1876
calculi, Alcaligenes faecalis as nucleus, [Stuart] 1657—ab
calculi, glycerin therapy, [Lickint] 224—ab
calculi, piperazine for, 861
calculi, toxicity of dibutyl phthalate, 860
colic, denervation of ureter for, [Hepburn] 446—ab
decapsulation in suppurative nephritis, [Moriconi] 1185—ab
Disease: See also Nephritis; Pyelitis
disease (chronic), glomeruli disappear in, [Moritz] 784—ab
disease, eye diseases in, 2040
disease, glomerulus in, [Wilbur] 1100—ab
disease, heredity, 1245
disease, lipoid nephrosis, 1252
disease, lipoid nephrosis after syphilis treatment, 1390
disease phases indicating abortion, [Herrick] *1902
disease, pituitary posterior lobe and eclampsia, [Anselmino] 1897—ab
excision, symptoms after, 1091
extracts treatment of hypertension, [Gomez] 1412—ab
fetal, excrete urine? 126; (reply) [Waldman] 778
function and sugar threshold, [Bjering] 149—ab
function and urea elimination, [Bjering] 149—ab
function in toxicoses of pregnancy and eclampsia, [de Snoo] 1493—ab
function test, colorimetric, using intravenous iodine (diodrast), [Herbst] 872—ab
function test of glomerular efficiency, sodium ferrocyanide, [Stieglitz & Knight] *1760
function test, urea clearance, 511; 995—E
Glomerulus: See also Kidney disease; Kidney function test; Nephritis, glomerular
glomerulus, aglomerular kidney, 922—E (correction) 1161
hemorrhage from pelvis, pyelitis granularis cause of, [Intow] 1661—ab
histologic changes in malignant hypertension, [Caln] 292—ab
horseshoe, urography with neoskiodan, [Beer & Theodore] *181
inclusions in epithelial cells after bismuth preparations, [Pappenheimer] 1885—ab
infection, rheumatic, [Palilov] 1268—ab
insufficiency in nephritis, [Kutschera-Aichbergen] 225—ab
pedicle, simple tourniquet for, [Timberlake] 360—C
Pelvis: See also Kidney hemorrhage; Pyelitis; Pyelography
pelvis, dilatation of calices, [Salleras] 1814—ab
pregnancy in patient with only one, 859
pyelography injection of perirenal lymphatics, [Abeshouse] 1406—ab
pyelography, urea and intrarenal absorption, [Ciocca] 719—ab
rickets, [Svensgaard] 1744—ab
surgery, nephrotomy without suture, [Le Roy] 1185—ab
transplants, histologic studies, [Wu] 71—ab
tumor, preoperative roentgen treatment, [Randall] 1407—ab
tumor, small spindle cell sarcoma, [Watson & Russum] *1700
water elimination by, vs. anterior pituitary extract, [Iversen] 1744—ab
KITAZATO Memorial Library: See Library
KITSAP Dairy Vitamin D Milk, 1709
KLIPPEL-FEIL'S DISEASE, [Thaysen] 1744—ab
KNEE, acute infective arthritis, treatment, [Mouat] 376—ab
arthritis (suppurative), treatment, 1550
derangements of joint, [Henderson] 448—ab
histologic changes in various infections, [Keefer] 1100—ab
technic for placing artificial ligaments at, [Cotton] 446—ab
tuberculosis, treatment, [Waldenström] 636—ab
tumor (fluctuating) of joint, 1256
tumor sarcoma (primary) of synovial membrane, [Hohenthal] 456—ab
KOCH, ROBERT, most glorious epoch, 843—ab
KOCH, WILLIAM F., cancer outfit sued, 116
KOILONYCHIA: See Nails
KOLA Astier Granulated, 697—BI
KOLMER Luetin Test: See Syphilis diagnosis
KORANYI'S Sign: See Pleura effusion
KO-WE-BA Brand Strained Products, 111
KRAFT'S Brand Syrup, 341
KRAML Dairy Vitamin D Milk, 1623
KRANKENKASSEN: See Insurance, social
KREML Hair Tonic, eruption due to, [Ford] *183
KRIM-KO Chocolate Flavored Drink, 918; 1069; 1779; 2029
KRÜGER, SIMON, death, 202
KRUKENBERG Tumor: See Ovary tumor
KYMOGRAPHY: See Heart, roentgen kymography
KYPHOSCOLIOSIS: See Spine curvature

L

LA CAMPANA Flour, 261
LABIA Minora: See Vulva
LABOR: See also Abortion; Midwives; Obstetrics
[DeLee] *308
Anesthesia in: See Anesthesia
calculation of day of delivery, 1790
campaigning for deliveries at home, Germany, 2041
electrography, [Clason] 724—ab
induction, castor oil and quinine for, 1645
management in myoma praevium, [Koller] 723—ab
normal delivery after cesarean section, 1470; (reply; placental site factor) [Hewitt] 2050
pains, counting, [Müller] 723—ab
pains, counting of, and prognosis of delivery, [Siegert] 1997—ab
place of delivery vs. deaths from puerperal sepsis, [Watson] *1746
prematurity, relation to fall during pregnancy, 62
presentation, measurement of engaged head, [Hanson] 68—ab
presentation, occipitoposterior, version in, 1795
replacement of uterus after delivery, [Drosin] 1981—ab
survey of births (method of delivery), Iowa, 762
Third Stage: See Placenta expulsion
LABORATORIES: See also Lilly Research Laboratories; Saratoga Spa
A. M. A. Chemical Laboratory: See under American Medical Association
consultant for hospitals, [Alter] *1189
data and unaided senses, 892—ab
for examining aviation pilots, France, 1004
hospital abandons laboratory "practice of medicine," 1544
worker, mercury poisoning hazard in, 1255
LABYRINTHINE concussion, possible? 1721
LACQUER, quick-drying white, use on plaster-of-paris casts, [Greeley] 125—C
LACTATE-Ringer's solution, preparation; indications for injection, [Hartmann] *1350; *1352
LACTATION: See also Nipple
causes, [Winter] 1030—ab
lipid composition of leukocytes, [Boyd] 1989—ab
spontaneous, in girl aged 18, physiology of, 1397
LACTIC ACID in Blood: See Blood
LAKEVIEW Dairy Vitamin D Milk, 1623
LAMBLIA, Giardia lamblia, 63
LAMBLIASIS, Giardia infestation, 361
in childhood, [Gross] 379—ab
treatment of enteritis with neoarsphenamine by duodenal tube, [Lauda] 1743—ab
LA MOTTE blood chemistry outfits, 208
LAMP: See Heat; Infra-Red Rays; Sunlamps; Ultraviolet Rays
LAND O'LAKES Evaporated Milk, 260
LANDGRAF, H., 1325—BI
LANDIS-Herrmann Treatment: See Blood Vessels, disease; Endarteritis
LANGE Colloidal Gold Test: See Cerebrospinal Fluid test
LANGUAGE: See also Writing
of medicine, 842—E; [Skou] 1794—C
LANNO-RUB, 697—BI
LAPAROTOMY: See Abdomen
LARVA: See Metastrongylus
infestation by: See Creeping Eruption; Myiasis
LARYNGECTOMY, speech after, 768
LARYNX: See also Neuralgia, laryngeal
cancer, Coutard's treatment, 201
tuberculosis, electrocautery in, [Vandevere] 442—ab
tumors, papillomas, rebellious hemorrhages, 1552
LaSALLE'S nostrums, 205—BI; 429—BI
LASEGUE'S sign in low back conditions, 1875
LASHLURE: See Eyelash dye
LATERAL SINUS, gross sections of vessels that form torcular Herophili, [Gibbs] 868—ab
Thrombosis: See Thrombosis
LAUB'S Quality Bread, 1379
LAUREL Hill Creamery Vitamin D Milk, 1709
LAVAGE: See Stomach
LAWRENCE Sanitary Vitamin D Milk, 2029
LAXATIVES: See Cathartics
LAYTON Park Dairy Co. Vitamin D Milk, 1623
LEAD poisoning, diagnostic test, [Behrens] 380—ab
poisoning, encephalopathy, [Schwarz] 720—ab
poisoning, neuritis due to, [Cobb & Coggeshall] *1614
silver mine worker, furunculosis in, 2050
tolerance for, in foods, Committee on Foods report, 29
LEAGUE OF NATIONS text: checking illicit drug traffic, 120; 1959
LECTURES by foreign professors, Rosario, 1791
LEGION: See American Legion

LEGISLATION against sex offenses, Irish Free State, 848
allows action for damages after death, France, 1549
American Association for Labor Legislation, 1858—E
bill to limit number of medical students, France, 1788
cabinet approves sanitary laws, Italy, 1868
National Committee on Contraceptive Legislation, 1547
social insurance law unpopular, France, 1865
LEGISLATOR and the doctor, 1313—E
LEGS: See also Ankle; Extremities; Foot; Knee; etc.
bruises of shin, 1255
cramps in, 434
reduction of local obesity, 776
scoliosis and pelvic tilt with pain in right calf, 700
short (abnormally), roentgen demonstration, [Bamberger] 1267—ab
LEHMANN'S De Luxe Pineapple, 1151
LEIPOLDT, C. LOUIS, honored, 1962
LEISHMANIOSIS, canine, in Madrid and infantile kala-azar, 1392
acute agranulocytosis complicating kala-azar, [Zia] 1979—ab
infantile, Auricchio-Chieffi serum reaction for, [Auricchio] 1107—ab
kala-azar coexisting with malaria, [Cordeiro Ferreira] 146—ab
kala-azar in Texas, transmitted by toys, 777; 1175
transmission, [Thomson] 1573—ab
LEISHMANOID, dermal, [Brahmachari] 75—ab
LEMONS, California Fruit Growers Exchange advertising, 1379
juice, Bireley's California Orange Juice with, 919
juice, Golden Fruit Brand, 755
LENS, CRYSTALLINE, biology and chemistry, [Kirby] 633—ab
rôle of tetany in parathyroid cataract, [Evans] 1333—ab
LENSES: See Glasses
LENTICONUS, anterior, [Rones] *327
LENZI Reaction: See Tuberculosis, Pulmonary, diagnosis
LEONARD WOOD Memorial: See Leprosy
LEPROSY, alkali reserve in, [Herrera] 77—ab
bacteriology, 1868
in Belgian Congo, 504
international center for study of, 692
intradermal reaction with Mycobacterium leprae, [Montanés] 77—ab
Leonard Wood Memorial grants for research, 1386
nerves caseation in, 1552
LETTUCE, pellagra preventive value, [Wheeler] 375—ab
LEUKEMIA, aleukemia, [Merklen] 1994—ab
diagnosis, staining blood with methylene blue, 693
form of remission of liver treated pernicious anemia, [Brugsch] 1031—ab
heterophile antibody test in, [Bernstein] 525—ab
lymphatic, resembling rheumatic fever, [Sutton] 872—ab
myelogenous, periosteal ossification in, [Ehrlich] 293—ab
myelogenous, treatment, 626
LEUKOCYTES count, leukocytosis in chronic pulmonary tuberculosis, [Elrick] 1182—ab
count; leukocytosis in diagnosis of whooping cough, 1174
count, Schilling differential hemogram, 1645
counting, use of rotor in, [Bryan & Garrey] *1059
counts during pneumothorax treatment, [Deegan] 1180—ab
Cream: See Angina, agranulocytic
distribution, diagnostic utilization, [Nagy] 1897—ab
in herpes immunity, [Jamuni] 217—ab
leukocytometric formula in typhoid, [Parini] 1338—ab
lipid composition during pregnancy, etc., [Boyd] 1989—ab
monocyte-lymphocyte ratio in pulmonary tuberculosis, [Muller] 1025—ab
monocyte, monocytosis and monocytic leukosis, [Doan] 1981—ab
monocyte origin, relation to clasmatocyte, [Wiseman] *1527
origin, [Wiseman] *1524
polymorphonuclear, constitutional abnormality, [Shaw] 299—ab
viscidity, determination, [Ebergényi] 879—ab
LEUKOCYTOSIS: See Leukocytes count
LEUKODERMA: See also Vitiligo
heredity of congenital white spotting in Negroes, [Keeler] *179
LEUKOPENIA genesis in typhoid, [Hashimoto] 1893—ab
Malignant; Toxic: See Angina, agranulocytic
LEUKOPLAKIA buccalis, [Sturgis] 140—ab
LEUKORRHEA in pregnancy, 778
treatment, copper ionization, [Tovey] 522—ab
LEVENGOOD Dairies Vitamin D Milk, 1623
LEVINE, MORRIS, boasting young Russian jailed, 762
LIBBY'S Peter Pan Evaporated Milk, 1539
Natural Hawaiian Pineapple Juice, 1779
LIBRARY: See also Books; Journals; Ophthalmology
Army Medical Library, Medical Research Correlating Bureau—a warning, 1161
Association, Cleveland, 1242
Dental: See Dental
kitazato Memorial, 1553
Los Angeles County Society, opened, 1628
public, popular medical volumes at, [Millman] 855—C
LICENSURE: See also Medical Practice Acts; State Board Reports
A. M. A. Annual Congress on (Feb. 1935), 1713
Chiropractor Initiative: See Chiropractor
eclectic diplomas and licenses investigated, Arkansas, 1313
illegal practitioners presented, Pennsylvania, 1716
internship required by, *571; *572
number of licenses to practice granted, Germany, 491
of foreign school graduates, Mississippi, 267
registration of foreign physicians, England, 421
LICHEN, lichenification in chronic atopic eczema, [Hill] *1432
planus (acute), precipitated by sunlight, [Anderson & Ayres] *1284
planus in aged, 1728
LID: See Eyelids
LIFE Duration: See Old Age
expectancy in arteriosclerotic heart disease, [Viko] *554
Insurance: See Insurance
Powder and Universal Preservation Remedy, 697—BI
LIGAMENTS, Artificial: See Knee
LIGAMENTUM nuchae, myositis ossificans in, [Thomson] 1181—ab
LIGATURE: See Aneurysm, innominate
LIGHT: See Skyshine; Sunlight
LIGNIERES, JOSÉ, death, 426
LILLY Research Laboratories, dedicated, 999
LIME, removal from aluminum kettle, 1399
LIMESTONE, response of peritoneal tissue to, [Miller & others] *909; *910
LINDSTROM, AXEL O., naturopath, California, 1240
LINKS' Test: See Cancer diagnosis
LIPASE, experimental production of fat necrosis, [Neal] 289—ab
in Blood: See Blood
LIPID in Blood: See Blood
LIPOID Cell Pneumonia: See Pneumonia
necrobiosis lipoidica diabeticorum (Urbach), [Michelson & Laymon] *163
Nephrosis: See Kidney disease
LIPOMA, intussusception in adult caused by, [Poston] 875—ab
LIPOSARCOMA, primary, of bone, [Barnard] 1734—ab
LIPS: See also Harelip
cancer, x-rays for, [Molesworth] 717—ab
fissures, 939
furuncles of upper, radiotherapy, 1389
keratosis, [Sturgis] 140—ab
LIQUOR: See Alcohol; Beer; Whisky
LISTER, JOSEPH (Lord), most glorious epoch, 843—ab
LITERATURE: See Bibliography; Books; Journals; Language; Library; Writing
LITHIASIS: See Bladder; Gallbladder; Kidney; etc.
LIVER, action in diuresis, [Villaret] 1812—ab
acute yellow atrophy in pregnancy, [Stander] 783—ab
amebic lesions [Meleney] *1216
appetite stimulating and growth promoting property, [Johnson] 1408—ab
blood circulation, gallbladder as regulator, [Heckmann] 223—ab
cancer, metastatic from gastro-intestinal tract, [Marting] 73—ab
cancer, primary, [Culpepper] 521—ab
changes with obstructed biliary passages, [Stewart] 711—ab
cirrhosis, in Lebanon and Syria, [Yenikomshian] *660
cirrhosis with hemolytic anemia and hematinemia, [Hijmans Van Den Bergh] 1496—ab
cirrhosis with xanthomatosis, [Schilling] 452—ab
complications of intestinal amebiasis, [Lynch] *1149
disease, diagnosis, value of urobilinuria and urobilinogenuria, [Fischler] 1107—ab
disease, erythrocytes size in, [Angelini] 1813—ab
disease, estimating ammonia in blood, [Monguió] 1267—ab
disease, Takata reaction, [Jezler] 1577—ab; [Schindel] 1660—ab; [Neuweiler] 1816—ab
disease, tyrosinuria, 30—E
disorders, atony of small intestine in, [Bayer] 1414—ab
echinococcosis, hydatid cysts, [Carayannopoulos] 877—ab
LIVER—Continued
Extract: See also Amebiasis; Anemia, Pernicious; Jaundice, hemolytic; Liver preparations; Pellagra; Thrombosis
extracts, commercial, assay of, [Dameshek & Castle] *802
factors in hemoglobin regeneration, 192—E
function and acute febrile disorders, [Brochner-Mortensen] 1998—ab
function and alcohol, [Bauer] 1340—ab
function test, bile acid tolerance, [Nakagawa] 1742—ab
function test, bilirubin tolerance, [Brochner-Mortensen] 1188—ab
function test, Bufano glycocoll technic, [Cacciuri] 2058—ab
function test, carbohydrates in, [Pavel] 144—ab
function test, galactose, [Jankelson] 945—ab; [Schiff & Senior] *1924
function test in nervous disorders and in opiate addiction, 1866
function test, ketonemic curve after ingesting sugar, [de Flora] 379—ab
function test, water tolerance (Mancke-Rohr) in skin disease, [Dölken] 1742—ab
hernia into umbilical cord containing, [Niebuhr & others] *16
hormone, hematopoietic, 1081
inflammation (acute), chloride elimination in, [Török] 146—ab
inflammatory swelling, elastic adhesive bandage for, [Stolle] 225—ab
Oils: See Cod Liver Oil; Halibut; Haliver Oil
perihepatitis, Concato and Pick disease, 702
Preparations: See also Mouth exanthems
preparations, hypersensitivity to, [Grün] 454—ab
size in nursling toxiceses, [Szász] 305—ab
Therapy: See Amebiasis; Anemia, Pernicious; Angina, agranulocytic; Liver preparations; Mouth exanthems; Pellagra; Sprue, Thrombosis
tumors, vomiting of blood in, [Beer] 880—ab
LOCKE, MAHLON—foot twister extraordinary, 1153—E
LÖWENSTEIN Method: See Tubercle Bacillus
Ointment: See Diphtheria immunization
LOMBARD Surgical Society, 1867
LONG ISLAND College, 1629
LONG ROYAL Bread, 1379
LOTTERY: See under Hospitals, financing
LOUSTE, ACHILLE, death, 766
LUMBAR Puncture: See Spinal Puncture
Vertebra: See Spine
LUMBER Camps: See Camps
LUMBERMEN'S Mutual Casualty Company, [Nordholz] 1641—C; 1863
LUMENS, bismuth oxychloride modified radiopaque mass for injection of, [Poth] 1023—ab
LUNGS: See also Pleura: Pneumonia; Pneumonoconiosis; Pneumothorax
Abscess: See also Lungs suppuration
abscess in children, [Smith] *971
abscess, treatment, x-ray diagnosis, bacteriology, mortality, healing, [Brunn] *1999
amebic lesions [Meleney] *1217
Anthracosis: See Pneumonoconiosis
Aspergillosis: See Aspergillosis
aspiration of barium facilitating death, [Sullivan] *337
atmospheric pressure within, and blood pressure, [Adrio Mateo] 1575—ab
Blastomycosis: See Blastomycosis
cancer, bloody pleuritic fluid sign of, 626
cancer (primary), [Hill] 220—ab; [Playd] 1898—ab
cancer (primary), lobectomy for, [Young] 784—ab
cancer, surgical treatment, [Rienhoff & Broyles] *1121
collapse, acute massive atelectasis in pulmonary tuberculosis, [Silvelman] 523—ab
collapse, atelectasis in children, [Anspach] 67—ab
collapse, infarction, diseases, etc., dyspnea in, [Meakins] *1444
cystic disease, congenital, [Wood] *815
disease, oleothorax in, [Capani] 792—ab
disease, pus reaction in, [DeBlasi] 301—ab
echinococcosis (central), treatment, [Chavannaz] 451—ab
edema, carotid sinus in, [Salmon] 1106—ab
edema from irritant gases, [Henderson] *836
Excision: See Bronchiectasis
fibrosis, estimating disability in, [McCann & others] *810
fibrosis or silicosis, 1472
Fluke: See Paragonimus westermani
foreign body, needle, removed by incision, [Lebsche] 795—ab
function, testing by histamine, [Heymer] 1577—ab
fungous diseases [Smith] *973
giant excavation mistaken for pneumothorax, [Karan] 1482—ab
hyperventilation (carbon dioxide) and aeration, [Beecher] 1989—ab
Infiltration: See Tuberculosis, Pulmonary
inhaled silica effect on normal, [Gardner] *743

LUNGS—Continued
suppuration, alcohol therapy, [Grasso] 1894—ab
suppuration, cerebral complications, [Cohen] 786—ab
tissue, induced deposition of calcium in, [Hunter] 1892—ab
tissue, micro-incineration in silicosis diagnosis, [Irwin] 948—ab
Tuberculosis: See Tuberculosis, Pulmonary
Vital Capacity: See Vital Capacity
LUNULA: See Nails
LUPUS erythematosus, bismuth for, 1562
erythematosus, combined arsenic-gold therapy, [Steiner] 1415—ab
erythematosus, irritating effect of sunlight, [Anderson & Ayres] *1280
LUSK, GRAHAM, at twenty-five, 821—ab
LUXOR B Alpine Sun Lamp, 1150
LYMPH canals in repair of lesions due to incisions and burns, [McMaster] 1569—ab
composition in formation of edema, [Weech] 443—ab
serum and, 1952—E
LYMPHATIC SYSTEM: See also Leukemia, lymphatic
adenopathies (postinfluenzal) of infancy, [Ruelle] 144—ab
cell reactions in nodes draining sites of primary cancer, [Welsh] 1811—ab
mesenteric glands and metamorphosis of metastrongylus larvae, [Hobmaier] 443—ab
obstruction of bile duct by adenopathies, [Brulé] 877—ab
obstruction, producing edema and elephantiasis by, 191—E; [Drinker] 370—ab
perirenal lymphatics, pyelography injection, [Abeshouse] 1406—ab
postmortem injection of lymphatics, 513
retroperitoneal nodes, goiter with metastasis to, [Doepfner] 1658—ab
skin lymphatics, [Tobias] 507—C
spinal cord and, [Gilchrist] 299—ab
tuberculoid reaction in nodes, [Laymon] 1807—ab
tuberculosis, 514
tuberculosis of mediastinal, 201
tuberculosis, permeability of glands invaded by, 273
LYMPHATISM, thymic death, 856; 1256
LYMPHEDEMA of extremities, [Allen] 1652—ab
produced by lymphatic obstruction, 191—E; [Drinker] 370—ab
LYMPHOBLASTOMA, etiology, rôle of chronic infection, [Desjardins] *1033
LYMPHOCYTES, origin of white blood cells, [Wiseman] *1524
choriomeningitis produced by encephalitis virus, [Armstrong] 1103—ab
monocyte-lymphocyte ratio in pulmonary tuberculosis, [Muller] 1025—ab
LYMPHO-EPITHELIOMA of nasopharynx and tonsils, [Cappell] 715—ab
LYMPHOGRANULOMA, [Adlercreutz] 1032—ab
bone changes in Hodgkin's disease, [Craver] 294—ab
experimental Hodgkin's disease, [Steiner] 443—ab
Hodgkin's disease, infection or neoplasm, [Krumbhaar] 1979—ab
inguinale, Frei test for; recover antigen from pustular reaction, [Strauss & Howard] *1830
inguinale, spinal fluid and eyeground in, [Kitagawa] 301—ab
inguinale, virus, cultivation; use, [Tamura] *408
nature of Hodgkin's disease, 1520—ab
torulosis with Hodgkin's disease, [Fitchett] 1100—ab
LYMPHOMA, struma, [Polowe] 2056—ab
LYMPHOSARCOMA of female genitals, [Walther] 223—ab

M

MACARONI, Fontana's Semolina, 1151
McCORMICK'S Bee Brand Cake and Pastry Spice, 341
McCOY, FRANK, dietary quack on dysentery, 347—E
no longer with Los Angeles *Times*, [Taggart] 622—C
McGILL University neurology department, 1001
MACIVER, D. M., death, 1962
MACROCYTIC Anemia: See Anemia
MACY'S Baby Foods, 1453
MAGGOTS Infestation: See Myiasis
MAGNESIUM Chloride: See Cancer, treatment
Sulphate: See Blood Pressure, high; Eclampsia, treatment; Pregnancy, toxemia
MAGNO-VIBRATOR, Vestvold's Orificial, 992
MAID O'Clover Vitamin D Milk, 341
MAIMONIDES anniversary, 1714
MALACIA: See Brain; Osteomalacia
MALADIE de crocodile in papyrus Ebers, 858
MALARIA, absent in France, 690
autochthonous, Paris, 199
chronic, lactic acid in blood, [Demurtas] 145—ab
control, draining marshes in Agro Pontino, Italy, 1962
control projects of FERA, 1861
MALARIA—Continued
crusade against, Ardea, Italy, 1321
diagnosis, Henry's melanoprecipitation reaction, [Greig] 716—ab; 1892—ab
erythrocytes susceptibility to, [Eaton] 1652—ab
in Australia, 1869
in deltas of Rhine and the Meuse, 426; 851
in tropical Africa, 504
increase, South Carolina, 1630
kala-azar with, [Cordeiro Ferreira] 146—ab
liver cirrhosis in Lebanon and Syria, [Yenikomshian] *660
outbreak in C C C camp, Iowa, 999
outbreak, North Carolina, 926
outbreak, U. S., 1001
prevention in tropics, 1559
tertian, with unusual skin manifestations, [Davis] 296—ab
Therapeutic: See also Neurosyphilis; Paralysis, General
therapeutic, disintegration of erythrocytes and bilirubin in, [Végh] 1897—ab
MALDEN Brand Pure Evaporated Milk, 413
MALINGERING, fraudulent fevers, 511
voice imitation in simulated deafness, [Baldenweck] 718—ab
MALLEOLUS, external, replaced by free tibial transplant, [Noetzel] 1660—ab
MALNUTRITION: See Nutrition
MALPRACTICE: See also under Medicolegal Abstracts at end of letter M
law allows for damages after death, France, 1549
MALT Soup Extract, Borcherdt's, 1623; 2029
MALTA FEVER: See Undulant Fever
MALTED MILK: See Milk
MAMILLA: See Nipple
MAMMARY GLANDS: See Breast
MANCHER'S solution, [Fantus] *1854
MANCKE-ROHR Test: See Liver function test
MANDIBLE: See Jaws
MANGANESE Butyrate: See Gonorrhea treatment
poisoning, chronic, [Canavan] 1484—ab
MANSON, PATRICK, memorial, 422
MANTOUX TEST compared with other tests, [Kayne] 1490—ab
clinical value in childhood, [Gaisford] 1892—ab
in assessing allergy in tuberculosis, [Westwater] 1491—ab
Tuberculin for Mantoux Test (P. D. & Co.), 491
MAPLE Syrup: See Syrup
MAPLEWOOD Cream Co. Vitamin D Milk, 1623
MARGARINE: See Oleomargarine
MARIE, AUGUSTE, death, 688; 1004
MARIJUANA: See under Medicolegal Abstracts at end of letter M
MARLIN Mineral Crystals, 697—BI
MARRIAGE, hereditary cutaneous diseases and consent to, Germany, 931
medical examination required before, England, 1864
per thousand women in childbearing age, Japan, 1322
MARSHALL'S Cubeb Cigarettes, 204—BI
MARSHES, Draining: See Malaria, control
MARTIN, LOUIS, director of Pasteur Institute, 56; 1960
MASKS, gas, children taught to wear, 1788
value in puerperal sepsis, [Watson] *1745
MASSACHUSETTS State Society, [Parkins] *546; *547
MASTITIS: See Breast inflammation
MASTODYNIA: See Breast
MASTOID, pathologic changes, [Tibbets] 139—ab
MASTOIDITIS caused by Pneumococcus mucosus, 691
neurologic observations, [Nielsen] 1986—ab
MASTOSOL, use in plastic surgery on face, [New] 1438—ab
MATERNAL mortality, England, 198; 1003; 1787
mortality, Kings County Medical Society program to reduce, Brooklyn, 351
mortality reduced, California, 495
mortality, relation to prenatal care, [DeNormandie] 1809—ab
mortality, Richland County leads, Illinois, 761
mortality, study of, North Carolina, 268
mortality, survey, Georgia, 1859
National Committee on Maternal Health, Inc., [Emerson] 1169—C
MAXILLARY SINUS cancer extending into cranial cavity, [Finkelman] 1263—ab
roentgen study, [Sedwick] 1021—ab
tumors, reconstructive surgery for, [New & Figi] *1435
MAXILLARY SINUSITIS, chronic, antiseptics in, 702
MAYER, MAY BENZENBERG, psychoanalyst convicted, 351
MAYO, William and Charles, American Legion award citation to, 416—E; 496
MEAD'S Dextri-Maltose with Vitamin B, 260
MEASLES, complications, bronchopneumonia or tuberculosis, 701
diagnosis, sign of semilunar fold, [Meyer] 378—ab,
epidemic, Jemez, New Mexico, 195
MEASLES—Continued
in southern Peru, 788
physician contracts, allowed compensation, 502
trend of, 682—E
MEAT, chilled, 929
digestion, 1255; [Rehfuss] *1600
storage of, from abroad, England, 1078
MECHOLIN: See Arthritis, treatment
MECKEL'S GANGLION, cocainization, [Stewart] 142—ab
MEDALS: See Prizes
MEDIASTINAL GLANDS: See under Lymphatic System
MEDIASTINUM, roentgen exploration, [Andrus] 714—ab
tumor, fibroblastoma, removed by one-stage operation, [Harrington & Craig] *1702
venous obstruction in upper, [Pilcher] 784—ab
MEDICAL AND DENTAL Business Bureau, Indianapolis, credit department, 495
MEDICAL ASSOCIATION of South Africa and new workmen's compensation act, 852
MEDICAL CENTER: See also Health center
MEDICAL CENTER, Jerusalem, 1161
MEDICAL COLLEGE: See also Schools, Medical
of South Carolina, 1160
MEDICAL CONGRESS at Balatonfüred, 620
MEDICAL CORPS: See Army
MEDICAL EXAMINATION: See Physical Examination
MEDICAL JURISPRUDENCE: See also Medicolegal; Medicolegal Abstracts at end of letter M
A. M. A. Session on Forensic Medicine, 46
application of serologic individuality tests, [Landsteiner] *1041
court decision on responsibility in criminal abortion, 1866
institute of legal medicine at Lille, 271
MEDICAL MUSEUM: See Museum
MEDICAL PRACTICE ACTS: See also under Medicolegal Abstracts at end of letter M
Fisher (William) jailed for violation, California, 1073
illegal practitioners investigated, Mississippi, 1242
MEDICAL RESEARCH Correlating Bureau of Washington, D. C., 1161
Council report on medical uses of radium, 1864
Council sponsors research in bacterial chemistry, 421
MEDICAL SERVICE: See also Hospitals
aerial, Australia, 1388
Alameda County (Calif.) plan of caring for low income group, 897—ME
Bureau for the needy, District of Columbia, 1783
for indigent, applicants cleared through Social Service Exchange, New York City, 1785
for indigent diabetics, dining room for, Madrid, 1392
for indigent medical field representative, Minnesota, 1315
for indigent, San Diego Central Clinic Service, 923—ME
for South African natives, 847; 852
for villages, Japan, 1165
of air force, England, 499
organized medicine and medical care, 112—E
radio consultations on high seas, 2042
Wayne County Medical Society, Detroit, plan, 759—ME
MEDICAL WOMEN'S International Association, 1957
MEDICINAL SPRINGS: See Mineral waters
MEDICINE: See also Economics, Medical; Education, Medical: Fees: Medical Service; Physicians; Surgeons: Surgery; etc.
Academy of: See Academy
allied professions conference, 1385
contract practice and medical ethics, 263—E
contract practice scheme, B M A in conflict with, 1162
Dental: See Dental
Forensic: See Medical Jurisprudence
French Assembly of General Medicine, 930
group practice, successful industrial, [Bloom] 1155—ME
History: See also Schools, Medical
history, most glorious epoch, 843—ab
history, pageant, Boston, 1714
honorary workers of, Soviet Union, 1552
Industrial: See Industrial
Internal: See Internal Medicine
language of, 842—E; [Skou] 1794—C
Military: See Military medicine
National Congress of (fifth), 1791
organized, and Committee on Economic Security, 1454—E
organized, and medical care, 112—E
Practice: See also Medicine, contract practice; Medicine, group practice; Physicians, practicing
practice, medical ethics and new methods of, 263—E
practice, panel, admission of physicians to, Germany, 501
practice, rural, obstetrics in, 1556
practice, sale of as ethical problem, 1466
practice vs. research; individualism, [Herrick] *882; *883
profession, defenders, Madrid, 1392

MEDICINE—Continued
profession in prisons, [Jones] 206—C
profession, reorganized on basis of new state organization, Austria, 1790
progress, exhibit, Rochester, N. Y., 1861
Socialized: See also Insurance, health; Insurance, social; Medicine, state
socialized, doctor and legislator, 1313—E
socialized, "doctor, dollars and disease," 1310—E
socialized, jeopardizes office buildings, 1953—ME
state, Dallas County Society condemns, 1862
Women in: See also Physicians, women
women in, Great Britain, 1163
women in, U. S., *573
MEDICOLEGAL: See also Medical Jurisprudence; Medicolegal Abstracts at end of letter M
Brazilian Congress, 1553
MEDOSWEET Dairies Inc. Vitamin D Milk, 1709
MEINICKE Reaction: See Tuberculosis diagnosis
MELANCHOLIA, involutional, etiology; theelin for, [Werner & others] *13
MELANOMA or venous ectasia, 1646
MELANOPRECIPITATION Reaction: See Malaria
MELENA neonatorum, 1173
MELLO Loaf Bakers Flour, 261
MELLOW Milk, 1709
MEMBRANES, Fetal: See Fetus
MEN, Old: See Old Age
MENINGES: See also Radiculomeningomyelitis
angioma with brain cortex calcifications, [Krabbe] 1653—ab
hemorrhage (subdural), [Leary] *897
subarachnoid space during procaine hydrochloride anesthesia, [Vehrs] 1336—ab
traumatic subdural hematoma, [Zollinger & Gross] *245
MENINGITIS: See also Choriomeningitis
acute aseptic, [Viets] 1264—ab
anaerobic, after mumps, [McEwan] 221—ab
Bacillus enteritidis, [Vaughn] 138—ab
cerebrospinal fluid chlorides in, [Finkelstein] 791—ab
cerebrospinal, spinal punctures and insufflation of air for, [Matovetskiy] 1268—ab
cerebrospinal, treatment by suboccipital route, [Facatselli] 1412—ab
streptococcic, Vincent's serum for, 500; 1720
treatment, roentgen rays, [Hippe] 793—ab
tuberculous, in infants, [Rueda] 1812—ab
tuberculous, tryptophan test in, [Rosenblatt] 441—ab
undulant fever, [Hartley & others] *251
MENINGO-ENCEPHALITIS, in pneumonia in children, 1720
MENINGORADICULITIS, pain of, chordotomy for, [Polenov] 955—ab
MENNELL'S SIGN, 1875
MENOPAUSE, bleeding during, 1719
disorders, pituitary anterior lobe changes after irradiation, [Stöckl] 79—ab
excretion of estrin, [Robson] 220—ab
hormone studies, [Frank & others] *393
involutional melancholia in, theelin for, [Werner & others] *13
neuralgias, treatment, [Pisk] 454—ab
symptoms after hysterectomy, [Tamis] 783—ab
urticaria at, 1326
MENSTRUATION: See also Amenorrhea; Dysmenorrhea
abortion between two periods, [Heim] 795—ab
disorders, diagnosis and therapy based on hormone studies, [Frank & others] *393
disorders, infra-red rays for, [van Amstel] 80—ab
disorders of endocrine origin, [Elden] 1098—ab
edema, [Sweeney] *234
edema of ankle, 1255
headache at period, 776; 1399
in pulmonary tuberculosis, [Smilovits] 1413—ab
intermenstrual pain and ovulation, 1253
irregularities and amenorrhea, 1011
"safe period," [Boas] 80—ab; 756—E; [Emerson] 1169—C; [Feiurzrok] 1333—ab
Saniway Cups to replace pads, 130
toxin, [Mommsen] 1743—ab
tuberculotoxic symptoms, [Kriech] 455—ab
vaginal bleeding in new-born, 1970
MENTAL DEFECTIVES: See also Sterilization, Sexual
treatment, change in, England, 1959
MENTAL DEPRESSION: See Depression; Melancholia
MENTAL DISEASE: See also Dementia Praecox; Depression; Hospitals, psychiatric; Insanity; Psychosis; etc.
blood sugar curve in, 273
iris contractions retarded in, 618
patients (foreign) in France, 121
patients, Kahn reaction in, 768
therapeutic abortion in, [Cheney] *1914
treatment, hematoporphyrin, [Strecker] 292—ab
treatment, sodium amytal, in stuporous and uncommunicative patients, [Smith] 1988—ab
MENTAL HOSPITALS: See Hospitals, psychiatric
MENTAL HYGIENE, National Committee for, 25 years, 1717
Rockefeller Foundation aids research in, 1387
services, England, 1318
survey of facilities, Washington, 1460
survey of teachers' college, Massachusetts, 1384
MENTAL STIMULUS, disease as, 1455—E
MENTHYMOIL, 429—BI
MENTOIL, 697—BI
MERCURIC Chloride: See Mercury
MERCUROCHROME, effects on cervix, 703
MERCURY: See also Salyrgan
diuretics, action on histamine blister, [Steffanutti] 1574—ab
impregnation, effect on hair, 1399
mercuric chloride, anuria caused by, [Balázs] 722—ab
poisoning hazard in laboratory worker, 1255
Sulphide: See Syphilis, treatment
MERRIMAN Dairy Vitamin D Milk, 1709
MERSALYL: See Salyrgan
MESENTERY: See Embolism; Thrombosis
METABOLISM: See also Acid; Calcium; Carbohydrates; Cholesterol; Copper; Iron; Phosphorus; etc.
aspects of chronic arthritis, [Pemberton] 1481—ab
barometric pressure in, 514
basal, apparatus for determining, 513
basal, dilaudid and morphine effects on, [David] *474
basal, effects of tobacco smoking, 1382—E
basal, estimation, in patient with amputation, 860
basal, importance of measuring, [Newburgh] 1981—ab
basal, Jones Motor-Basal Apparatus, 1620
basal, rate, compound iodine solution effect on, 282
basal, rate, iodine in blood and urine, [Elmer] 80—ab
Dinitrophenol as Stimulator: See Dinitrophenol
disorders, dyspnea in, [Meakins] *1444
exercise effect on, 1866
exercise tolerance test, [Soskin] 215—ab
increased, from thyroid, [Cutting] 525—ab
oxalic acid in, 1152—E
respiratory exchange, pharmacologic agents effect on, [Labbé] 718—ab
respiratory quotient, effect of high fat meal on, [Bowen] 1737—ab
Stimulator: See Dinitrophenol; Thyroxine
METAL fume fever in welding industry, 129
METAPHEN Collodion Mixture: See Impetigo contagiosa
Ophthalmic Butyn 2% and Metaphen 1:10,000, 917
Treatment: See Peptic Ulcer
METASTASIS: See Cancer; Goiter; Sarcoma
METASTRONGYLUS larvae, metamorphosis, [Hobmaier] 443—ab
METEORORESENSITIVE and meteororesistant diseases of children, 1163
METHENAMINE: See Urotropin
METHYLENE BLUE: See Methylthionine Chloride
METHYLTHIONINE CHLORIDE, blood sugar reducing effect, [Gabrielli] 222—ab
in localizing perforated peptic ulcers, [Nisbet] 527—ab
staining blood with, in leukemia diagnosis, 693
toxic symptoms, [Nadler] 631—ab
METRIC equivalent of teaspoon, 1457—E
MEYER'S Corn Syrup, 1379
MICHEL clips, rapid application, [Bailey] *562
MICROCEPHALUS, premature osseous union of skull sutures, 2046
MICROBIOLOGY: See Bacteriology
MICROINCINERATION aid in diagnosis of silicosis, [Irwin] 948—ab
MIDWIVES, license of Mary A. E. Murphy revoked, St. Louis, 1385
training, International Midwives' Union discuss, 199
use of drugs by, and the BMA, 421
vs. obstetrics, [DeLee] *307
MIGRAINE: See also Headache
allergic character, 620
related conditions, [Paskind] 785—ab; [Földes] 1179—ab
treatment, ergotamine tartrate, [Lennox] 219—ab
MILITARY medicine, International Bureau of Bibliography of, 1005
medicine, sixth annual symposium, 616
physicians, training, 1006
service, physicians, Rumania, 425
MILK: See also Butter; Buttermilk; Infants feeding
acidophilus, Supplee Bacillus Acidophilus Milk, 1708
adulteration, Madrid, 1392
allergy, 360
allergy, desensitization in child, 775
allergy in acute gastro-enteritis, [Tallerman] 449—ab
arteriosclerosis and milk and eggs, 639—ab
borne epidemic of septic sore throat (New Jersey) 350; (New York) 845
MILK—Continued
Brucella abortus in, of "carrier" cows, [Thompson] 871—ab
Chocolate: See Beverages
code (new) in effect, January 1, New York, 1955
Consumers' Guide on current production and consumption, 841—E
Diet: See Obesity, treatment
evaporated, brands accepted, 29; 111; 260; 342; 413; 919; 1229; 1539; 1709
impure, campaign against, Illinois, 844
malted, Horlick's Lunch Tablets, 1379
Mellow Milk—Homogenized, Pasteurized, 1709
peptonized, absorption from rectum, 1327
Secretion: See Lactation
sterols in, 190—E
supply and courts, 1072—E
Therapy: See Gonorrhea; Peritonitis
Velvo Pasteurized Homogenized, 681
Vitamin D: See also Buttermilk
vitamin D, clinical experience, [Lewis] 874—ab
vitamin D in milk of cows fed irradiated yeast, 493—E
vitamin D pasteurized, brands accepted, 341; 839; 919; 993; 1069; 1151; 1453; 1623; 1709; 2029
watering, new test for, 1162
MILLET eaters, pellagra in, [Corkill] 716—ab
MILTON Quality Tomato Juice, 111
MINERAL, maternal needs, [Macy] 522—ab
Oil: See Petrolatum, liquid
waters, medicinal springs, Japan, 202
MINERS, coal, epidemic papulopustular eruption in, [Dowling] 141—ab
lead-silver, furunculosis in, 2050
sulphur, diseases, 1963
MINES, accident prevention, England, 119
eradicating ancylostomiasis from South Africa, 499
MIRRORS, used in orthoptic training, [Gulbor] *916
MISCARRIAGE: See Abortion
MISSISSIPPI Valley Tuberculosis Conference, 928
MISSOURI Academy of Science, 1545
State Medical Association, abstract of proceedings, 286
MITOGENETIC Radiations: See Cells
MITRAL VALVE stenosis, venous pressure in, [Espejo Solá] 720—ab
MITY GOOD Brand Syrup, 1379
MOGLE, L. R., chiropodist guilty, 349
MOLDS, etiology of asthma and hay fever, [Prince] 1571—ab
MOLE: See Nevus
Hydatidiform: See Uterus
MOLL, P. de V., death, 852
MOLLUSKS: See Shellfish
MONEY Back Brand Syrup, 564
MONGOLISM: See Idiocy, Mongolian
MONILIA test in infantile eczema, [Hill] *331
MONOCYTES: See Leukocytes
MONTCO Evaporated Milk, 1229
MORO Pure Virgin Olive Oil, 261
Test: See Tuberculin test
MORPHINE: See also Dilaudid
addiction problem, [Edmunds & others] *1417
asphyxia from, [Henderson] *836
effects on basal metabolism and other functions, [David] *474
hyperglycemia and grape sugar, [Maeda] 75—ab
MORRHUATE: See Sodium
MORTALITY: See Heart disease; Infants; Maternal mortality; Vital Statistics; etc.
MOSES' Herb Discovery; Expectorant, 429—BI
MOSQUITOES, bite, amount of yellow fever virus injected by, [Davis] 947—ab
campaign against, Connecticut, 265
eradication to prevent dengue fever, 685; 761
MOTH caterpillar (New Mexico range), dust of, allergic response to, [Randolph] *560
proofing agent, sodium fluoride, effects, 280
MOTHER: See Maternal
MOTHER'S Jumbo Bread, 1379
MOTION PICTURES, American Social Hygiene Association withdraws sponsorship of "Damaged Lives," 1387
cineradiography, [Reynolds] 789—ab
of A.M.A. headquarters activities, 1154—E
MOTOR Cars: See Automobiles
MOUSE Typhus: See Typhus
MOUTH: See also Gums; Lips; Stomatitis; Stomatology; Teeth; Tongue
bacteriologic relation to appendix, 1867
cancer, radium treatment, 1864
disease of mucosa with acute vulva ulcer, [Talalov] 1807—ab
exanthems (bullous), liver preparations in, [Sebba] 794—ab
infection after injecting local anesthetic, 1472
leukoplakia buccalis, [Sturgis] 140—ab
MT. VERNON Evaporated Milk, 1539
MUCOUS MEMBRANE: See Intestines; Mouth; Nose; Stomach
MULFORD Acidophilus Bacillus Blocks, 1948
MUMPS: See Parotitis
MUNCH, G. A., denied a license, 265

MURDER: See also Suicide
handwriting movements of convicted murders, 684—E
MURI Brand Tomato Juice, 1379
MUSCLES: See also Myalgia; Myasthenia; Myositis
abdominal, congenital absence, [Housden] 1265—ab
amyloidosis, [Michelson] 372—ab
Atrophy: See Atrophy
Cardiac: See Heart muscle
chemism in diabetes, [Marañón] 451—ab
Cramps: See Cramps
disorders, creatine-creatinine metabolism in myopathies after amino-acid therapy, [Beard] 1980—ab; 2031—E
Dystrophy: See Dystrophy
Exercise: See Exercise
hypertrophy, postneuritic, [Krabbe] 789—ab
in vascular repair, [Dixon] *1129
overextension in paralyses, [von Puky] 1816—ab
pathology of myopathies, 1442—ab
Scalenotomy: See Tuberculosis, Pulmonary, 2049
spasm, 624
spasm, histamine iontophoresis in, [Doane] 1983—ab
Sprains: See Sprains
Tonus: See Myotonia
twitching after death, 1644
MUSEUM, medical, to be established at Indiana, 1458
MUSHROOMS, Dawn Fresh, 1539
Excelsa, 342
Gravy, Fontana's, 838
Jacob, 838
Kennett, 1709
MUSICIAN: See Flute player; Saxophone player
MUSSEL poisoning, [Stegeman] 712—ab
quarantine, California, 49
MUSTARD Gas: See *dichlorethylsulphide*
oil, nutritive value, [Brahmachari] 529—ab
MYALGIA, barbituric, [Castin] 1813—ab
MYASTHENIA gravis, amino-acid therapy (glycine; glutamic acid), [Tripoli & others] *1595
gravis, glycine and ephedrine in, 698
MYCOBACTERIUM Leprae: See Leprosy
MYCOSIS: See also Actinomycosis; Blastomycosis
dermatitis of axilla, 1398
diagnosis of skin sensitization and, 2047
therapy, [Fantus] *832
MYDRIATICS, ephedrine, 1647
MYELITIS: See Radiculomeningomyelitis
MYELOMA of bone marrow, 1049—ab
MYLASIS Linearis: See Creeping Eruption
traumatic dermal, chloroform-vegetable oil douche for, [Stewart & Boyd] *402
MYOCARDIUM: See Heart muscle
MYOMA: See Uterus tumors
MYOPATHY: See Muscles disorders
MYOPIA, education of children with, England, 848
progressive; approved surgical treatment, 1015
treatment, 509
MYOSITIS ossificans in ligamentum nuchae, [Thomson] 1181—ab
treatment, histamine, [Kling] 786—ab
MYOTONIA, acquired, [Krabbe] 789—ab
MY-TE-GOOD Brand Chocolate, 260
MYXEDEMA, heart in, [Lerman] 868—ab

MEDICOLEGAL ABSTRACTS

ABORTIONS: criminal; revocation of physician's license; pregnancy must be proved, 1882
ACCOUNT STATED: bill of physician as creating, 1650
ACIDS: sulphuric; neuritis, multiple, attributed to, 440
ADVERTISING: revocation of physician's license, 1178
ANESTHESIA: See also Malpractice
death from nupercaine; insurance, accident, in relation to, 707
ANTHRACOSIS: inhalation of fumes and dust as cause of, 866
ASTHMA: bronchial; inhalation of fumes and dust as cause of, 866
AUTOPSIES: consent; by surviving spouse bars suit by child, 2054
CHILDBIRTH: See also Malpractice
"born alive;" proof necessary in infanticide case, 1977
fecundity; presumption of rebuttable, 519
COMPENSATION OF PHYSICIANS: account stated; bill as creating, 1650
consultant; liability for fee of, 1650
contract; by expert witness valid, 519
witnesses, medical expert; contract for fee valid, 519
CONTRACTS: dead bodies; disposal of by contract, 2054
CORONERS: lay; as expert witnesses, 1566
CORPORATIONS: hospital may supply medical services, 629
optical; right to hire licensed optometrists for customers, 440
CRIMES: See also Insanity, in Criminal Relations
infanticide; proof of live-birth necessary, 1977
irresistible impulse as defense, 1479
DEAD BODIES: disposition of by contract, 2054
disposition of by will, 2054
DENTAL PRACTICE ACTS: licenses, revocation; advertising special ability, 1178
licenses, revocation; board may not initiate proceedings, 1404
licenses, revocation; charges must be filed with board, 1404
licenses, revocation; hearing in nature of inquisition not contemplated, 1404
DENTISTS: See Dental Practice Acts; Malpractice
DISEASES: See also particular diseases; Workmen's Compensation Acts
pain as constituting disease, 1479
pre-existing; contributing factor to injury; liability, 440
EMBALMER: competency as expert witness, 1566
EPILEPSY: trauma as cause of, 866
EVIDENCE: books, medical; admissibility, 66
books, medical; use in cross-examination, 66
complaints of patients, 285
hospital records; admissibility, 1566
hospital records; opinion of expert witness based on, 1566
mortality tables, 707
roentgenograms; identification of, 1332
roentgenograms; testimony based on roentgenogram not identified, 1332
witnesses, lay; opinion testimony as to health, 707
witnesses, medical; testimony compellable, 519
witnesses, medical expert; books used in cross-examination, 66
witnesses, medical expert; compensation payable, 519
witnesses, medical expert; competency of, 1566
witnesses, medical expert; embalmer as, 1566
witnesses, medical expert; lay coroner as, 1566
witnesses, medical expert; opinion based on conflicting testimony, 1332
witnesses, medical expert; opinion based on hospital records, 1566
witnesses, medical expert; opinion based on roentgenogram not identified, 1332
witnesses, medical expert; opinion ignoring established facts evaluated, 866
witnesses, medical expert; opinion invading province of jury, 1020
witnesses, medical expert; qualifications, 1566
witnesses, medical expert; testimony not compellable, 519
witnesses, medical expert; undertaker as, 1566
FECUNDITY: presumption of rebuttable, 519
FORMALIN: See Malpractice
HEALTH DEPARTMENTS: exclusion of unvaccinnated children from school authorized, 1019
HEMORRHAGES: cerebral; cause of, testimony of expert witness admissible, 1020
HERNIA: See also Workmen's Compensation Acts
strain (overexertion) as cause of, 285
HOSPITALS, CHARITABLE: liability for: burns, hot water bottle, 944, 1020
liability for: nurses, negligences of, 1404
municipal hospital liable for negligence (burns), 944
HOSPITALS FOR PROFIT: liability for: burns, electric pad, 944
tort feasors; release of as affecting hospital's liability, 944
HOSPITALS, GOVERNMENTAL: municipal hospital liable for negligence (burns), 944
HOSPITALS, IN GENERAL: fees; for medical services may be collected, 629
"inmate" of hospital construed, 1977
medical services; hospital may furnish, 629
practice of medicine by, 629
IDIOSYNCRASY: See Insurance, Accident
INFANTICIDE: proof of live-birth necessary, 1977
INJURIES: See also Trauma; Workmen's Compensation Acts
disease, pre-existing, a contributing factor; liability, 440
prenatal; liability for, 368
INSANITY, IN CRIMINAL RELATIONS: criteria of criminal responsibility, 134, 1479
evidence; irresistible impulse, 1479
INSURANCE, ACCIDENT: "accidental injuries" defined, 707
"accidental means" construed, 1978
anesthesia; death from nupercaine, 707
idiosyncrasy of patient in relation to, 707
infection from prolonged use of bedpan, 1978
suture of operation wound as medical or surgical treatment, 782
tetanus due to suturing wound; insurance money not payable, 782
INSURANCE, HEALTH: typhoid carrier not "totally and permanently disabled," 1801
INSURANCE, LIFE: "inmate" of hospital construed, 1977
autopsies; consent by surviving spouse bars suit by child, 2054
MALPRACTICE: after-care; negligent post tonsillectomy treatment, 1731
anesthesia; formalin mistakenly used for, 1178
bandages; Volkmann's contracture attributed to, 66
burns; roentgen; therapeutic use of roentgen rays, 286
childbirth; death of baby, 368
childbirth; infection following, 368
chiropractors; cerebral hemorrhage and death following "adjustment," 1260
cure; no warranty by physican, 368
dentists; extraction of teeth contemporaneous with tonsillectomy, 1801
employers; liability under workmen's compensation act, 66
evidence; res ipsa loquitur; infection following childbirth, 368
evidence; res ipsa loquitur; roentgen burns, 286
evidence; witnesses, lay; admissibility of testimony, 1731
evidence; witnesses, medical expert; credibility, contribution to medical defense fund may be shown, 440
evidence; witnesses, medical expert; necessity for, 66, 368
foreign bodies; sponges, 1978
formalin; mistakenly used for novocaine, 1178
fractures; bandaging; Volkmann's contracture attributed to, 66, 1882
fractures; Volkmann's contracture attributed to improper bandaging, 66, 1882
glucose solution; injection causing sloughing of tissue, 134
joint liability; of attending physicians, 1566
judgment of physician; liability for error of, 707
limitation of actions; accrual of right of action, 1650, 1978
limitation of actions; concealment of right of action, 1650, 1978
medical defense by state association; evidence of witness' contribution to fund admissible, 440
medical defense by state association; witness may explain medical defense activities, 440
methods of treatment; conflict of opinion concerning, 134
negligence; affirmative proof necessary, 368
negligence; causal relation to injury must be proved, 1095
negligence; inferable from circumstances, 1260
novocaine; formalin mistakenly used for, 1178
operations; negligent postoperative care, 1731
osteopaths; negligent postoperative care, 1731
prophylactic treatment; failure to administer, 1095
roentgen rays; burns; therapeutic use, 286
skill and care; degree required, 368, 1801
skill and care; degree required of specialists, 367
skill and care; in relation to judgment, 707
skill and care; selection of method of treatment, 134
sloughing of tissue following injection of glucose solution, 134
specialists; degree of skill required, 367
sponges left in patients, 1978
teeth; extraction contemporaneous with tonsillectomy, 1801
tetanus; failure to administer antitetanic serum, 1095
tonsillectomy; extraction of teeth contemporaneous with, 1801
tonsillectomy; negligent postoperative care, 1731
tort feasors; release of as affecting physicians' liability, 944, 1978
Volkmann's contracture attributed to improper bandaging, 66, 1882
workmen's compensation act as affecting liability of physician, 66
MARIJUANA: defined, 212
possession of; defendant must prove lawfulness, 212
MASSAGE: as practice of medicine, 1479
MEDICAL PRACTICES ACTS: advertising; revocation of license for advertising, 1178
corporations; practice of medicine by hospitals, 629
corporations; practice of optometry by, 440
disease; pain does not constitute, 1479
evidence; depositions in revocation proceedings, 630
examining boards; deposition as evidence, 630
examining boards; judicial powers, scope of, 367
examining boards; legislative power of, 367
hospitals; medical services may be furnished by, 629
licenses, reciprocity; denial of license upheld, 66
licenses, revocation; abortions, criminal, pregnancy must be proved, 1882
licenses, revocation; advertising special ability, 1178

MEDICOLEGAL ABSTRACTS—Continued
MEDICAL PRACTICE ACTS—Continued
licenses, revocation; board may not initiate proceedings, 1404
licenses, revocation; causes for, legislature enumeration of not exclusive, 708
licenses, revocation; causes for, legislature must specify, 367
licenses, revocation; charges must be filed with board, 1404
licenses, revocation; depositions inadmissible, 630
licenses, revocation; fraud in obtaining license, 367
licenses, revocation; "good moral character," 367
licenses, revocation; gross malpractice, 367
licenses, revocation; hearing in nature of inquisition not contemplated, 1404
licenses, revocation; injunction to restrain, 630
licenses, revocation; procedure described, 367
licenses, revocation; "unprofessional or dishonorable conduct," 708
massage; when practice of medicine, 1479
nuisances; violations of medical practice act as, 1260
prosecutions; attorney general may institute, 1260
prosecutions; equity jurisdiction to restrain violations, 1260
prosecutions; injunctions; enforcement of medical practice act by, 1260
NARCOTICS: possession; defendant must prove lawfulness, 212
NEURITIS: multiple; sulphuric acid poisoning as cause of, 410
NEUROSIS: trauma as cause of, 1480
NUISANCES: violations of medical practice act as, 1260
NUPERCAINE: death from, in relation to accident insurance, 707
NURSES: negligence of; liability of charitable hospitals, 1404
OPTOMETRY: corporations, optical; right to employ licensed optometrists, 440
PARALYSIS: Landry's; cold as cause of, 1882
PARALYSIS AGITANS: trauma as cause of, 520
PHARMACISTS: prescriptions; error in compounding, liability, 782
POISONING: sulphuric acid; neuritis, multiple, attributed to, 440
PRESCRIPTIONS: error in compounding; liability of pharmacist, 782
PRIVILEGED COMMUNICATIONS: disclosures by examining physician employed by patient constitute waiver, 781
waiver; implied, by patient's disclosure of condition, 781
waiver; testimony by patient's examining physician constitutes waiver, 781
SCHOOLS: exclusion of unvaccinated pupils authorized, 1019
SMALLPOX: exclusion of unvaccinated pupil from school authorized, 1019
STATISTICS: mortality tables as evidence, 707
STERILITY: presumption of fecundity; rebuttable, 519
STRAIN (OVEREXERTION): hernia attributed to, 285
ulcer of stomach; perforation of attributed to, 2054
TETANUS: prophylactic treatment; liability for failure to administer, 1095
THROMBOSIS: coronary; trauma as cause of, 1978
TRAUMA: epilepsy attributed to, 866
neurosis attributed to, 1480
paralysis agitans attributed to, 520
thrombosis, coronary, in relation to, 1978
tuberculosis attributed to lowered resistance due to trauma, 708
TUBERCULOSIS: trauma causing lowered resistance as cause of, 708
TYPHOID FEVER: carrier not "totally and permanently disabled," 1801
inoculation; injury from compensable, 1332
ULCERS: stomach; perforation of attributed to overexertion, 2054
VACCINATION: death from; compensation allowed under compensation act, 1096
exclusion of unvaccinated pupil from school authorized, 1019
WILLS: dead bodies; testimentary disposition of, 2054
WORDS AND PHRASES: "accident," 944
"accidental," 866
"accidental injuries," 707
"accidental means," 1978
"born alive," 1977
"disease," 1479
"fraud or deception in obtaining license," 367
"good moral character," 367
"inmate of hospital," 1977
"marijuana," 212
"personal injuries," 2054
"physically disabled," 1801
"surgical operation," 782
"total and permanent disability," 1480
"totally and permanently disabled," 1801
"unprofessional or dishonorable conduct," 708
WORKMEN'S COMPENSATION ACTS: anthracosis; compensation allowed, 866
asthma, bronchial; compensation allowed, 866
bruise; compensation denied, 944
disease, pre-existing (arteriosclerosis), 1978
disease; resistance lowered by trauma as cause; compensation allowed, 708
epilepsy and death, attributed to trauma, 866
evidence; witnesses, medical expert; opinion ignoring established facts evaluated, 866
fracture of semilunar cartilage; refusal to undergo operation, 1731
gases; injury from inhalation of; compensation allowed, 866
hernia; compensation allowed, 285
hernia; refusal to undergo operation, 1480
Landry's paralysis attributed to a cold, 1882
malpractice by physician; liability for, 66
medical treatment; operation, offer of prior to petition for compensation; effect of, 1731
medical treatment; operation, refusal to, undergo, 630, 1480, 1731
neurosis, traumatic; compensation allowed, 1480
paralysis agitans; compensation denied, 520
pre-existing disease (arteriosclerosis), 1978
thrombosis, coronary; death from compensable, 1978
tuberculosis; due to lowering of resistance by trauma; compensation allowed, 708
typhoid fever; injury from inoculation; compensation allowed, 1332
ulcer of stomach; perforation of due to overexertion, 2054
vaccination, death from; compensation allowed, 1096

N

N. J. C. Pure Food Brand (chocolate) 260; (syrup) 1379; (tomatoes) 1379
N. R. A.: See National Recovery Administration
NAIL, Smith-Petersen: See Femur fracture
NAILS, finger, lunula, 1012
finger, ridges of, 2046
hyperkeratosis subungualis, 1562
lateral separation or kollonychia, 61
Ringworm: See Ringworm
sensitization to Cutex nail white, 126
NAPHTHA, hazards in hat cleaning, 1013
NARCISSISM and depression, 1173
NARCOLEPSY: See under Sleep
NARCOSIS: See Anesthesia
NARCOTICS: See also under Medicolegal Abstracts at end of letter M
Addiction; See also Codeine; Dilaudid; Morphine; Opium
addiction, justifiable, and nerve block, [Lichtenstein] 218—ab
regulations, Italy, 693
traffic, checking, League of Nations text, 120
traffic: growth of clandestine factories, League of Nations report, 1959
NARRAGANSETT Chocolate, 1539
NASOPHARYNX tumor, lympho-epithelioma, [Capelli] 713—ab
NATIONAL: See also International; under list of Societies at end of letter S
Advisory Council: See Radio
Association of Science Writers, 1076
Board of Medical Examiners, 615; 1563
Committee for Mental Hygiene, 25 years, 1717
Committee on Contraceptive Legislation, 1547
Committee on Maternal Health, Inc., [Emerson] 1139—ab
Congress of Stomatology, Italy, 1963
Education Association, secretary, 1957
Radium Trust and Radium Commission, 1718
Recovery Administration, surgical trade code forbids rebates, 1071—E; [Hovey] 1088—C
Research Council, grants, 53
Tuberculosis Association Christmas Seal, 1317
Vaporizers, 1946
Yeastolized (Medicated) Salt, 429—BI
NATOMA Farm's Vitamin D Milk, 919
NATURE cure movement, Berlin's, 1164
NATUROPATH, initiative measure defeated, Arizona, California and Oregon, 1239; 1240; 1242 1541—E; 1713
Lindstrom (A. O.) on probation, California, 1240
NAZI, unrecognized tuberculosis in storm troops, Germany, 423
NECK: See also Ligamentum nuchae; Throat
cancer and, branchiogenic cancer, [Cleland] 1491—ab
infection of glands, 1797
looseness of skin, 1474
NECROBIOSIS lipoidica diabeticorum (Urbach), [Michelson & Laymon] *163
NECROPSY: See also Medicolegal Abstracts at end of letter M
internship hospitals with highest percentages, *580
roentgenograms, [Bowen] 1264—ab
NECROSIS: See also Fat; Fingers; Heart muscle; Ulcer
after radium treatment, [McCoy] 951—ab
NECROSPERMIA: See Spermatozoa
NEEDLES, removal from lung by incision, [Lebsche] 795—ab
sterilization for artificial pneumothorax, 2050
NEGATIVE Pressure: See Blood Vessels disease; Endarteritis
NEGROES, arcus senilis in, 939
children, health survey, East St. Louis, 1074
health program, Illinois, 686
heredity of congenital white spotting in, [Keeler] *179
in medical schools, *574; *575
medical services for South African natives, 847; 852
medical training of South African natives, 1632
NEOARSPHENAMINE, agranulocytosis due to, [Groen] 796—ab; [Fitz-Hugh] 1099—ab
blindness after, [Juler] 2057—ab
leakage into tissues, treatment, 1014
sensitization to, 1725
Treatment: See Lambliasis; Tularemia
NEO-CULTOL, 204—BI
NEO-PROBILIN, 1473
NEOSKIODAN: See Urography
NEO-SYNEPHRIN Hydrochloride Emulsion (Aromatic) 917
Procaine-Neo-Synephrin Hydrochloride Hypodermic Tablets, 917
NEPHRECTOMY: See Kidney excision
NEPHRITIS, chronic, cause of fetal deaths, 62
complicating impetigo, [Sutton] 1183—ab
experimental, edema in, [Dunn] 299—ab
glomerular (chronic), retinal lesions in, [Cannady & O'Hare] *6
glomerular, modified Takata reaction, [Jezler] 1577—ab
in infancy, [Rennie] 1991—ab
intravenous saline solution in, 1014
kidney insufficiency in, [Kutschera-Aichbergen] 225—ab
phases indicating abortion, [Herrick] *1902
suppurative, decapsulation and sympathectomy in, [Moricone] 1185—ab
treatment of chronic Bright's disease, [O'Hare] *1373
NEPHROPATHY: See Kidney disease
NEPHROSIS: See Kidney disease
NEPHROTOMY: See Kidney
NERI'S SIGN, 1875
NERVES: See also Anesthesia; Ganglion; Nervous System; Neuritis; Neurology; Neuronitis; Paralysis
Block: See also Anesthesia; Ganglion, sympathetic
block and justifiable addiction, [Lichtenstein] 218—ab
blocking with procaine hydrochloride for trophic processes, [Vishnevskiy] 149—ab
caseation, in leprosy, 1552
external respiratory, of Bell, [Woltman] *460
fifth and seventh involved in diabetic gangrene, [Brier] *1704
graft (autoplastic) for facial palsy, [Sullivan] 1984—ab
Median Paralysis: See Paralysis
optic atrophy and tryparsamide, 1253
optic atrophy in syphilis, 1973
optic, lesions in pregnancy, [Wagener] *1910
optic, syphilis of, tryparsamide in, 434; 861
parasympathetic, supply to distal colon, [Trumble] 1265—ab
peripheral, roentgen study with thorium dioxide sol, [Saito] 1981—ab
phrenic, pressure point in gallbladder disease, [Bayer] 1661—ab
Phrenicectomy: See Tuberculosis, Pulmonary
pressoreceptor, and thyrotoxic crises, 31—E
NERVINE, Tan-A-Wa, 697—BI
NERVOTOL, 697—BI
NERVOUS SYSTEM: See also Brain; Cerebellum; Spinal Cord; etc.
disorders, dyspnea in, [Meakins] *1445
in pernicious anemia, 1169
localization principia in, 122
Syphilis: See Neurosyphilis
NERVOUS SYSTEM, SYMPATHETIC: See also Ganglion, sympathetic
autonomic, 765
autonomic, in poliomyelitis, 840—E
chemical exclusion of surgically exposed, [Doppler] 304—ab
infiltration with procaine hydrochloride in phlebitis, [Leriche] 1658—ab
menstruation and, in pulmonary tuberculosis, [Smilovits] 1413—ab
parasympathetic physiology, 704
relation to carbohydrate metabolism, [Davis] 1887—ab
Surgery: See Ganglionectomy, lumbar; Ramisectomy; Sympathectomy
NERVOUSNESS after procaine and epinephrine injections, 860
NEURALGIA, intercostal, in gastric ulcer, [Giordano] 222—ab
laryngeal (superior) relieved by operation, [Echols & Maxwell] *2027
menopausal, treatment, [Plsk] 454—ab
trigeminal, drugs in tic douloureux, 1796
trigeminal, electroneurolysis (galvanic current) in, [Fracassi] 1492—ab
NEURASTHENIA, treatment, in general practice, [Smith] *1111
undulant fever incorrectly diagnosed as, [Evans] *665

NEURITIS: See also under Medicolegal Abstracts at end of letter M
etiology of local and polyneuritis, [Cobb & Coggeshall] ★1608
muscular hypertrophies after, [Krabbe] 789—ab
of vulva, 1647
peripheral, effect of glycine on creatinuria, [Allinson] 1735—ab
polyneuritis, rôle of digestion and absorption tract in, [Strauss] ★1
polyneuritis from, triorthocresyl phosphate and apiol, [Smith] 2045—C
thallium, [Ellis] 2045—C
NEUROCUTANEOUS syndrome: congenital ectodermoses, [Kulchar] 1023—ab
NEURODERMATITIS: See Eczema
NEUROLOGISTS, International Congress of (fourteenth), 930
therapeutic abortion indications from standpoint of, [Cheney] ★1914
NEUROLOGY, American Board of, organized, 1547; 1717
Brazilian Congress of, 1553
changes in pernicious anemia, [Goldhamer & others] ★1663
department at McGill, Rockefeller endows, 1001
International Neurologic Congress (second), 1002
observations in mastoiditis, [Nielsen] 1986—ab
pituitarism in, [Tucker] 297—ab
symptoms of hyperinsulinism, etc., [Rynearson & Moersch] ★1196
NEURONITIS of pregnancy, [Maisel & Woltman] ★1930
NEUROPSYCHOSIS: See Psychoneurosis
NEUROSIS: See also Psychoneurosis; under Medicolegal Abstracts at end of letter M
posttraumatic, and head injury, 346—E
vasomotor, anterior pituitary preparations in, [Rudsit] 795—ab
vasomotor, of mamilla, 1474
NEUROSYPHILIS: See also Nerve, optic
asymptomatic, malaria therapy in, [O'Leary] 441—ab
cardiovascular syphilis relation to, [Healey] 1184—ab
cerebrospinal syphilis, 129
of nervous system, 625; 1013; [Riebeling] 1817—ab
treatment, nonspecific, [Kral] 794—ab
NEUTROPENIA: See Angina, angranulocytic
NEVUS, removal, from cheek, 1561
NEW MEXICO Range Moth: See Moth
NEW STATE Brand Tomato Juice, 1379
NEW YORK Academy of Medicine (study of appendicitis), 1785; (honorary membership), 1861
area, pollens in, 63
NEWSPAPERS, McCoy no longer with Los Angeles *Times*, [Taggart] 622—C
NICOTINE: See also Tobacco
effects, 272
NIGHTINGALE Foundation: See Foundations
NINNI'S Method: See Tuberculosis
NIPPLE, bleeding, radium implantation for, [Cutler] 632—ab
bloody discharges from, [Bloch] 378—ab
vasomotor neurosis of, 1474
NITRAPHEN: See Dinitrophenol
NITROGEN, maternal needs, evaluation, [Macy] 522—ab
rest, increase in, [Kohlschütter] 302—ab
NITROPHENOL: See Dinitrophenol; Trinitrophenol (cross reference)
NOBEL Prize: See Prizes
NOFAL, 1084—BI
NOISE, deafness caused by pneumatic drills, 929
in the cities, France, 1245
making motor cars less noisy, England, 269; 1002
protection of radios against, 766
NOMENCLATURE: See Terminology
NONE-SUCH Pineapple (juice), 919; 1151
NOODLES, Fontana's Egg, 1229
NORDIC and Aryan myths, 764
NORMAL Schools: See Schools
NORRIS Juvenile Candies Dextrose Special, 838
NORTHWEST Hair Clinic, Inc., judge dissolves, 350
NORTHWESTERN University, 998
NOSE: See also Colds; Rhinitis; etc.
Accessory Sinuses: See Sinuses, Nasal
allergy, [Withers] 290—ab
allergy, autogenous vaccines for, [Cox] 1988—ab
argyria, [Monson] 69—ab
catheter administration of oxygen, [Barker & others] ★244
Cauterization: See Hay Fever treatment
deformities, reconstructive surgery in, [New & Figi] ★1434
mucosa desensitization in hay fever and asthma by ionization, [Warwick] 788—ab
mucosa, ionization, 861
mucous polyps, rôle of allergy in, [Kern & Schenck] ★1293
red, due to permanently dilated capillaries, treatment, 625
secretion in tuberculosis, 127
secretions, cytology in allergy, [Hansel] 137—ab
septum, resection, 776
NOURON, 2029
NOVARO, G. F., death, 1963
NOVOLEK, 697—BI
NUISANCES: See under Medicolegal Abstracts at end of letter M
NUMBNESS: See Arm
NUPERCAINE: See also under Medicolegal Abstracts at end of letter M
toxicity, 857
NURAN TABLETS, 697—BI
NURSES: See also under Medicolegal Abstracts at end of letter M
infantile paralysis among, California, 1239
tuberculosis in, 1968
NURSING education, 1070—E
education, professorship at U. of Chicago, 761
NUTRITION: See also Anemia, nutritional; Diet; Food; Infants, feeding; Vitamins
A. M. A. Exhibit on, Atlantic City Session, 1953
A. M. A. Session on, minutes, Cleveland Session, 46
changing concepts, [McLester] ★383
disturbances, 169—ab
epidemic dropsy, 959—ab
factors in chronic arthritis, [Pemberton] 1481—ab; [Sladen & others] 1734—ab
industrial depression and, England, 1388
malnutrition in school children declines, New York City, 1316
malnutrition survey, Illinois, 349
resistance to infection and, 994—E
undernutrition, diet for, [Brown] 1023—ab
xerophthalmia, [Thorson] ★1438

O

O.K.-LAX, 429—BI
OAK, pin, allergy to, 1397
OATMEAL Cere-Jel, Beech-Nut, 29
OBESITY, exogenic, treatment, [Arany] 1896—ab
local of legs, reduction, 776
thyrosexual atypical, reducing in, [Stark] 224—ab
treatment, diet, milk and banana, 436
treatment, diet, Proteo Bread in, 992
treatment, dinitrophenol, [Bohn] ★249; [Matzgen] ★253; [Sidel] ★254; 697; [Stockton & Cutter] ★912; [Silver] ★1058; 1644; 1950—E
treatment, Stretch-A-Way Reducer and Health Exerciser, 1621
OBITUARIES: See Deaths at end of letter D
OBSTETRICIANS, American Association of, 688
OBSTETRICS: See also Labor; Midwives; Paralysis, obstetric
advisory council appointed, New York City, 195
graduate course, Mississippi, 1629
hereditary factors, Germany, 1005
Hospital Obstetric Society of Ohio, 763
in rural practice, 1556
prize by International Foundation of Gynecology and Obstetrics, 1002
puerperal gynecology and, 2030—E
Vincent's antistreptococcus serum in, 2040
vs. midwifery, chairman's address, [DeLee] ★307
ODDI'S Sphincter: See Sphincter of Oddi
OFFAL: See Garbage
OFFICE buildings, socialized medicine jeopardizes, 1953—ME
OGDEN Dairy Co. Vitamin D Milk, 1623
OHIO State University Hundred Year Book, 1000
OIL: Cod Liver Oil; Halibut; Haliver Oil; Mustard Oil; Olive Oil
aspiration, pneumonia after, [Goodwin] 945—ab; [Grayzel] 950—ab
emulsions effect on lethal effects of bacterial toxins, [Myers] 449—ab
Fuel: See Fuel
Mineral: See Petrolatum, liquid
of Chenopodium: See Ascariasis
safe, specification of: cotton spinners' cancer, 1959
Vegetable: See Myiasis, traumatic
OLD AGE, aged physicians in the DIRECTORY, 1782—E
centenarians (records) 1163; (deaths) 1549
hypophyseal sex hormone in urine of old men, [Kukos] 534—ab
involution of mammary gland and cystic fibrosis, [Gatta] 635—ab
lichen planus in, 1728
pensions, Conference on Economic Security, 1624—E
subacute spinocerebellar degeneration in, [Greenfield] 789—ab
OLECRANON bursitis, treatment, 861
fracture, 859; (treatment) [Rombold] 1655—ab
OLEOMARGARINE, Jelke's Good Luck Vegetable, 260
OLEOTHORAX in pleuropulmonary diseases, [Capani] 792—ab
cerebral embolism after, [Renner] 1895—ab
OLIGURIA: See Urine
OLIVE OIL, Moro, 261
OMENTUM grafts in abdominal operation, [Graham] 1982—ab
ONION, pellagra-preventive value, [Wheeler] 375—ab
ONONDAGA Milk Producers Vitamin D Milk, 1709
OPAL Strained Products, 111
OPEN AIR School: See Schools
OPHTHALMIA neonatorum, [Fantus] ★25; [Fridenberg] 430—C
neonatorum, meeting on, Philadelphia, 1386
neonatorum, silver nitrate not being used, Illinois, 1383
neonatorum, treatment, [Swab] 290—ab
sympathetic, successful treatment, 2040
OPHTHALMIC Ointment Butyn 2% and Metaphen 1:10,000, 917
service in registered hospitals, A. M. A. resolution on, 1544
OPHTHALMOLOGISTS, photographs, Howe collection, 1784
German, Congress of, 2040
OPHTHALMOLOGY, American Academy of, 764; 928
clinic and library of de Grosz, 932
Congress of (47th), Paris, 271
dispensing optician and, 1856—E
University of Buffalo medal for work in, 1459
Washington Ophthalmological Society organized, 495
OPHTHALMOSCOPY and opticians, Japan, 1165
OPIUM: See also Dilaudid; Morphine
addiction, liver function tests in, 1866
OPPENHEIM'S Dermatitis: See Dermatitis atrophicans
OPTICIANS and ophthalmoscopy, Japan, 1165
dispensing, and ophthalmology, 1856—E
OPTOMETRISTS, A. M. A. resolution on hospitals employing, 35
OPTOMETRY: See under Medicolegal Abstracts at end of letter M
ORANGES, California Fruit Growers Exchange advertising, 1379
Dr. P. Phillips Tree Ripening, 839
juice, Bireley's California Orange Juice with Lemon Juice, 919
juice, effect on urinary citric acid excretion, [Schuck] 374—ab
juice, Golden Bear California, 839
juice, Good Morning Pure Florida, 1709
ORBIT, proper care of, with glass eye, 282
tumor, osteochondrofibrosarcoma, [Goldstein] 1023—ab
ORCHIEPIDIDYMITIS, nonspecific forms, 1632
ORDER of Physicians: See Physicians
ORE, crude, Kelpe'Koe, 1639—BI
ORGANS, outlines, friction method to determine, [Bukovala] 636—ab
ORONITE, hazards in dry cleaning from, 624
ORTAL Sodium, N. N. R., 1309
ORTHOPEDICS, prize offered by Rizzoli Institute, 420
surgery, modern methods, [Jones] 1812—ab
Treatment: See Arthritis, chronic
Western Orthopedic Association, 1863
ORTHOPHOSPHATES: See Phosphates
ORTHOPTIC training, instruments for, compared, [Guibor] ★916
OS Calcis: See Calcaneum
OSCILLOMETRY: See Arteries
OSMOTIC pressure of serum and of lymph, 1952—E
OSSIFICATION: See Calcification; Myositis ossificans; Periosteum
OSTEITIS deformans (Paget's) and parathyroid tumors, [Kienböck] 533—ab
fibrosa cystica and parathyroids, [Ficacci] 952—ab
fibrosa cystica of Recklinghausen, [Bauer] 533—ab; [Bergstrand] 709—ab
fibrosa or deformans, differential diagnosis, [Gutman & others] ★87
OSTEOCHONDRITIS deformans juvenilis, atypical Perthes', [Freund] 1482—ab
dissecans, [Hellström] 1662—ab
OSTEOCHONDROFIBROSARCOMA with tumor of orbit, [Goldstein] 1023—ab
OSTEOMALACIA, calcium and phosphorus metabolism in, [Hannon] 1411—ab
necropsy observations in, [Gunn] 524—ab
OSTEOMYELITIS, chronic, drill channels for, [Bozsan] 1655—ab
deformities of forehead result of, [New & Figi] ★1436
of mandible, treatment, [Miltner] 950—ab
treatment, bacteriophage, [Eaton & Bayne-Jones] ★1775
treatment, cod liver oil, [Löhr] 1995—ab
treatment, Stewart (trinitrophenol: calcium carbonate), [Kline] 1488—ab
OSTEOPOIKILOSIS: See Bones fragility
OTITIS MEDIA, acute, tetanus from, [Vener & Bower] ★480
appendicitis or pyelitis with, 1252
in infants, [Litschkus] 1816—ab
sinus disease with, [Cullum] ★1695
treatment, paracentesis vs. spontaneous perforation, 436
OTOLARYNGOLOGY, American Academy of, 764; 928
American Board of, 118; 1161; 1957
OTORHINOLARYNGOLOGY, course in, Washington, D. C., 1713
OTOSCLEROSIS, [Gray] 1811—ab
hearing devices in, 776
OTTOLENGHI, SALVATORE, death, 1321
OUTAGAMIE Vitamin D Milk, 341

OUTPATIENTS accepted only on letter from physician, Winnipeg, 1631
survey, Philadelphia, 615
OVARY, cancer, ascites with, 1475
cancer treated at Helsingfors clinic, [Bull] 1416—ab
cyst, unusual, recovery after operation, [Lloyd & others] *559
cysts, cystodiaphanoscopy in, value, [Klaften] 1992—ab
dysfunction, endometriosis as sign, [Jeffcoate] 1992—ab
function, hormone studies, [Frank & others] *393
Hormone: See also Estrin
hormone, effect on blood pressure, [Liebhart] 1188—ab
hormone for amenorrhea and epilepsy, [Stanca] 1897—ab
hormone for hirsuties, 353
hypofunction in etiology of diabetes, [Arias Vallejo] 146—ab
injury, rôle in genesis of tumors, [Willis] 1337—ab
insufficiency, reducing weight in, [Stark] 224—ab
thyroid relation to, 55
tumor, cystadenoma, 703
tumor, dysgerminoma, [Kleine] 1815—ab
tumor, Krukenberg, involving rectum, [Runyeon] *1199
tumor, torsion of pedicle, [Mönch] 381—ab
OVENS, R. E., fraudulent solicitor, 616
OVULATION: See also Menstruation, "safe period"
human, time of, [Kurzrok] 1333—ab
intermenstrual pain and, 1253
OXALEMIA: See Blood
OXALIC Acid: See Acid
OXALURIA: See Urine
OXYGEN, administered by nasal catheter, [Barker & others] *244
Atmosphere: See under Air
deficiency, protein economy and dextrose effect in, [Elias] 1340—ab
in Blood: See Blood
inhalation and athletic activity, 32—E
insufficiency in cardiac muscle cause of angina pectoris, [von Bergmann] 1576—ab
pressure (low), deficient acclimatization to, [Barcroft] 1993—ab
pressure (low), gastric motility under, [Van Liere] 1179—ab
Treatment: See also Thrombosis, coronary
treatment, Airco Oxygen Therapy Regulator, 2028
OXYURIS vermicularis, 1646
vermicularis, hexylresorcinol for, [Brown] *637
vermicularis, Vernonia anthelmintica for, [Chopra] 1027—ab
OYSTERS: See Shellfish

P

P. C. Ointment, 1084—BI
PACK, Paraffin: See Tuberculosis, Pulmonary
PAD: See Eyes, pad
PAGE'S Kleen Maid Vitamin D Milk, 341
PAGEANT, medical, Boston, 1714
PAGET'S Disease of Bones: See Osteitis deformans
PAIN: See also Abdomen; Amputation; Eyes; Herpes zoster; Myalgia; Neuralgia; Peptic Ulcer; Sciatica; etc.
Intermenstrual: See Menstruation
Labor: See Labor
Reflex: See Reflex
Relief of: See also Analgesics; Anesthesia; Cancer, pain; Meningoradiculitis
relief of, [Fantus] *1939
relief of, paraldehyde for, [Johnson] 219—ab
PAINT: See also Aluminum
poisons in, [Aldman] *641
PAINTER, possible benzene poisoning in, 1558
PAINTING, Chloroform: See Skin, disease
PALATE, cleft, 1646
PALILALIA and Gertrude Stein, 1710—E
in connection with habit spasm, [Sheffield] 1968—C
PALPITATION: See Heart
PAN AMERICAN Congress on Tuberculosis, 1318
PANAGGLUTINATION: See Blood groups
PANAMA Pacific Brand Pineapple, 1069
PANCAKE flour, Fisher's, 341
Syrup: See Syrup
PANCREAS, accessory, surgical importance, [Ugelli] 1183—ab
Disease: See also Pancreatitis
disease, diagnosis by estimating lipase and amylase in blood, [Zeilkson] 955—ab
Fistula: See Fistula
secretion, hyperinsulinism, neurologic signs, [Rynearson & Moersch] *1196
surgical disorders, [Rienhoff] 633—ab
PANCREATIC DUCT, cholangiography, thorium dioxide sol, [Saralegui] 1022—ab
obstruction in diabetes, [Zeckwer] 1484—ab
PANCREATIN, toxicity, 1562
PANCREATITIS, 933
acute, [Mikkelsen] 1662—ab
acute, operative treatment, 1530
duodenum diverticulum and, [Frentzel-Beyme] 1816—ab
PANSINUSITIS: See Sinusitis
PAPILLOMAS of larynx, 1552
PAPOOSE Root-Beer, 205—BI
PAPYRUS Ebers, pterygium or maladie de crocodile in, 858
PARADICHLORBENZENE: See Benzene dichloride
PARAFFIN Bath Method: See Arthritis
Oil: See Petrolatum, liquid
Pack: See Tuberculosis, Pulmonary, surgical treatment
PARAGANGLIOMAS and epinephrine hypertension, [Bauer] 1492—ab
PARAGONIMUS westermani, abdominal involvement, [Bercovitz] 714—ab
PARALDEHYDE: See Anesthesia; Convulsions; Pain, relief of
PARALYSIS: See also Paraplegia; under Medicolegal Abstracts at end of letter M
after repeated serum injection, [Hahn] 1659—ab
agitans, therapy, 1561
Bell's palsy, [Woltman] *460
eclampsia and, [Schwanen] 455—ab
facial, [Johnsson] 1818—ab
facial, autoplastic nerve graft for, [Sullivan] 1984—ab
facial, cured by decompression, [Sander] 1337—ab
facial, diagnosis, 1559
Infantile: See Poliomyelitis
median nerve palsy, calcium chloride intravenously produces, [Stevens] 376—ab
obstetric, brachial plexus injury of child, 857
obstetric, tendon transplantation in, [L'Episcopo] 710—ab
of Convergence: See Eyes
overextension of muscles in, [von Puky] 1816—ab
Spastic: See Paraplegia, spastic
spinal hemilateral, of diaphragm, [Bardenhofer] 1496—ab
PARALYSIS, GENERAL of insane, anticerebral reagin in spinal fluid, [Demanche] 1265—ab
of insane, cisternomalarial therapy, 2043
of insane, extra-intensive treatment, 1072—E
of insane, inoculate rabbits with cerebral tissue in, 1866
of insane, laboratory findings, treatment, results [Robards] 1656—ab
of insane, malaria treatment, hyperthermic factor, [Poglbko] 1340—ab
of insane, tick-bite fever inoculation for, 851
PARAPLEGIA, spastic, etiologic factors, [Winkelman & Eckel] *662
PARASITES, Intestinal: See Intestines
unidentified, in heart muscle, [Von Glahn] 1885—ab
PARASITOLOGIST, position for, U. S. Civil Service announces, 1461
PARASITOLOGY, Institute of, at McGill, 1001
PARASYMPATHETIC: See Nervous System, Sympathetic
PARATHYROID cataract, tetany of, [Evans] 1333—ab
Extract: See also Arthritis treatment
extract and viosterol, action, [Spies] 300—ab
hyperparathyroidism and related states, [Bauer] 533—ab
hyperparathyroidism, differential diagnosis, [Gutman & others] *87
osteitis fibrosa cystica and, [Ficacci] 952—ab
transplantation of living grafts, [Stone] 1886—ab
tumor, adenoma (heterotopic), [Bergstrand] 709—ab
tumor and Paget's disease of bone, [Kienböck] 533—ab
PARATYPHOID bacilli, arthritis caused by, [Ruiz Rijon] 1413—ab
Bacillus paratyphosus varieties, [Warren] 449—ab; [Habs] 454—ab
treatment, bacteriophage, [Eaton & Bayne-Jones] *1851
PARKELP, 697—BI
PAROTID GLAND, tumors, [Hintze] 1995—ab
PAROTITIS, anaerobic meningitis after, [McEwan] 221—ab
whooping cough cured by, [Klinefelter] *1372
PASTEUR, LOUIS, most glorious epoch, 843—ab
PASTEUR INSTITUTE, Dr. Louis Martin, director, 56; 1960
reorganization, 1960
PATCH Test: See Skin test
PATENTED Lenses: See Glasses
PATENTS, Harvard bans, 116
Congress of Belgian Medical Federation discusses, 2042
PATERNITY determined by agglutination tests, 704
forensic application of serologic individuality tests, [Landsteiner] *1041
PATHOLOGIST, full time, functions, in hospitals, [Alter] *1189
Society of Pathologists, 850
PATHOLOGY, A. M. A. resolution on board of examiners in, 39
International Society of Geographic Pathology, 197
physicians specializing in, *1230
PATIENTS: See Diabetes Mellitus; Heart disease; Mental Diseases; Tuberculosis; etc.
Pay Patients: See Hospitals, charity
PATRICK'S TEST, 1875
PAVAEX: See Blood Vessels, diseases; Endarteritis
PAVLOV, I. P., 85th birthday, 1551
PAY Patients: See Hospitals, charity
PEACHES, Cellu Juice-Pak, 564
PEANUT meal, pellagra-preventive value, [Wheeler] 375—ab
PEARS, Cellu Juice-Pak, 341
PEDIATRICIANS, Congress of French-Speaking, 1163
PEDIATRICS, A. M. A. resolution on dosage suitable for infants in U. S. P. X, 38
course in, Kentucky, 925
PEERLESS Dairy Co. Vitamin D Milk, 1623; 2029
PELLAGRA, alcoholic, neuritis with, [Cobb & Coggeshall] *1612
etiology, rôle of sunlight, [Anderson & Ayres] *1284
in millet eaters, [Corkill] 716—ab
preventive value of onions, lettuce, pork, and peanut meal, [Wheeler] 375—ab
rôle of gastro-intestinal tract in conditioning, [Strauss] *1
symptoms in gastro-intestinal diseases, [Goudsmit] 724—ab
treatment, yeast, stomach and liver extract, [Spies] 1264—ab
PELVIS, abscess, results of prolonged irradiation for, [Jones] *1678
cellulitis of tissues, 1475
depth, true, measurement for, [Schuman] 1651—ab
frozen; solid mass of induration fills, Elliott treatment, 514
infection, bacteriophage in, 514
irradiation in woman, [Jones] *1678; 1796
manipulation in subluxation of sacro-iliac synchondrosis, 1874
measurements, average, 1255
tilt with pain in right calf, 700
wound (gunshot), identifying semen stains after, 1255; (reply) [Lefkowitz] 1878
PEMPHIGUS, [Grace] 785—ab
acute, in granulocytopenia, [Fiala] 1983—ab
streptococcus in blood in, [Welsh] 1982—ab
PENDELL Dairy Vitamin D Milk, 1623
PENIS: See Corpora Cavernosa
PENROSE Lecture: See under Evolution
PENSIONS and politics, France, 1078
old age, 1624—E
war, abuse in France, 1551
PENTNUCLEOTIDE: See Angina, agranulocytic
PENTOSURIA: See Urine
PEPSIN Treatment: See Adhesions, abdominal; Peptic Ulcer
PEPTIC ULCER, cancer and, 1466
characteristic phenomenon of gastric, [Bojovitch] 451—ab
complications; prognostic significance, [Jordan & Kiefer] *2004
diagnosis, duodenal ulcer symptoms in hookworm, [Gibbes] 140—ab
etiology, caffeine produced gastric, [Hanke] 721—ab
etiology, heterotopic intestinal mucosa, [Clar] 1339—ab; 1380—E
hemorrhage (fatal) from gastric and duodenal, necropsy in, [Hjort] 150—ab
hemorrhage in duodenal, 1170; [Howard] 1570—ab
in child, 279
neuralgia (intercostal) in gastric, [Giordano] 222—ab
pain (indirect) localizations in gastric, [Ferretti] 1412—ab
perforated, methylene blue in localizing, [Nisbet] 527—ab
perforation, acute, [James] 143—ab
perforation of gastric and duodenal, pneumoperitoneum in, [Fernández Saralegui] 1814—ab
skin diseases and, [Bergman] 1031—ab
surgical treatment of gastric and duodenal, [Nicolaysen] 150—ab
symptoms and typhoid immunization, 360
tongue in gastro-duodenal, [Dobreff] 302—ab
trauma in relation to gastric, [Gray] 69—ab
traumatic, [Eusterman] 1807—ab
treatment, aluminum hydroxide, [Einsel] 1481—ab
treatment, diet (Jarotski, Sippy, Smithies) effect on dog's gastric secretion, [Alley] 2055—ab
treatment, histidine intramuscularly in gastric, [Bogendörfer] 1494—ab
treatment, indications, [Holst] 150—ab
treatment, internal, of gastric and duodenal, [Dale] 150—ab; [Dedlichen] 150—ab
treatment, jejunal tube in gastric, [Misske] 879—ab; [Fröilich] 1894—ab
treatment, medical vs. surgical, debate, 54
treatment, metaphen, 434

PEPTIC ULCER—Continued
treatment, of chronic gastroduodenal, [Jervell] 150—ab
treatment of duodenal ulcer after hemorrhage, 1170
treatment, pepsin, of gastric, [Glaessner] 447—ab
treatment, Sippy, modified, [Albrecht] 1106—ab
treatment, sodium benzoate injections, [Liberti] 1575—ab; [Fernandez] 2058—ab
varicose ulcers and, have features in common, [Riddle] 874—ab
PEPTIDE of Thyroxine: See Thyroxine
PEPTONE Broth: See Appendix, ruptured
PERCUSSION, new method, [Hasse] 1494—ab
PERFORATION: See Appendicitis; Peptic Ulcer; etc.
PERIADENITIS mucosa necrotica recurrens, 1255
PERIARTERITIS nodosa and rheumatic heart disease, [Friedberg] 1099—ab
PERICARDIECTOMY for advanced Pick's disease, [Flick] 786—ab
PERICARDITIS, electrocardiogram in, [Barnes] 1097—ab; [Peel] 1991—ab
exudative, treatment, [Hitzenberger] 1896—ab
PERICARDIUM: See Hemopericardium
PERICOLIC MEMBRANE syndrome, [Buermann] 135—ab
PERIDUODENITIS of appendicular origin, [Kadrnka] 144—ab
PERIHEPATITIS: See Liver
PERINEORRHAPHY: See Perineum
PERINEUM, repair of old laceration, 1645
repair, perineorrhaphy, [Edwards] 1334—ab
PERIODICALS: See Journals
PERIOSTEUM, chemical destruction for chronic empyema, [Jachia] 1024—ab
ossification in myelogenous leukemia, [Ehrlich] 293—ab
regeneration, after costal resection in thoracoplasty, [Di Paola] 877—ab
PERISTALSIS: See Intestines; Stomach
PERITONEUM: See also Omentum; Pneumoperitoneum
cavity, action of blood on bacteria in, [Teneff] 719—ab
dialysis in anuria, [Balázs] 722—ab
reaction to liquid petrolatum, [Norris & Davison] ★1846
tissue, response to dusts, [Miller & others] ★907
PERITONITIS, appendicitis with, treatment, [Coller & Potter] ★1753
bile, without visible gallbladder perforation, [Melchior] 953—ab
chronic, Concato and Pick disease, 702
complicating intestinal amebiasis, [Lynch] ★1148
incapsulans (chronic), [Hindse-Nielsen] 956—ab
treatment, autogenous vaccine milk, [Anderson] 1406—ab
treatment, surgical limitations, [Buchbinder] 1410—ab
typhoid, 1867
PERIVISCERITIS, diagnosis, and phonendoscopy, 848
PERKINS, FRANCES, 609—E
PERMANENT WAVE: See Hair
PERMEABILITY: See Capillaries
PERSPIRATION: See Sweat
PERTHES' Disease: See Osteochondritis deformans juvenilis
PERTUSSIS: See Whooping Cough
PETROLATUM, liquid, cause of loss in weight in children, [Till] 377—ab
liquid, effect on utilization of vitamin A and carotene, 1540—E
liquid, peritoneum reaction to, [Norris & Davison] ★1846
PETROUS BONE, pneumatic spaces in, variation in, 1707—ab
suppuration of apex, operative technic, [Myerson] 372—ab
treatment of petrositis, [Greenfield] 947—ab
PHARMACISTS: See under Medicolegal Abstracts at end of letter M
PHARMACOLOGISTS, All-Union Congress of (fifth), 1552
therapeutist and, [Musser] ★725
PHARMACOPEIA, International, needed, 847
U. S. P. X, A. M. A. resolution on dosage suitable for infants, 38
PHARYNX: See also Reflex, oculopharyngeal
secretion in tuberculosis, 127
PHENACETIN: See Acetphenetidin
PHENANTHRENE derivatives, morphine-like effects, [Edmunds & others] ★1418
PHENIX Dairy's Vitamin D Milk, 1151
PHENOBARBITAL, alcoholic solution, 1475
fate in body, 623
Sodium-Mallinckrodt, 1708
PHENOL in Blood: See Blood
PHENOLPHTHALEIN-bile salt combination, Neo-Probilin, 1473
*di*PHENYLENE OXIDE, [Edmunds & others] ★1419
PHENYLETHYLHYDANTOIN: See Chorea, treatment
PHILADELPHIA County Medical Society, President Brumm's message to, 927
PHILLIPS: See Dr. P. Phillips
PHLEBITIS: See also Thrombophlebitis
after gynecologic operations, 1865
treatment, 1472
treatment, procaine hydrochloride infiltration of sympathetic, [Leriche] 1658—ab
PHLORHIZIN, subcutaneously, blood sugar and urinary sugar after, 273
PHONENDOSCOPY and diagnosis of perivisceritis, 848
PHOSPHATASE in Blood: See Blood
PHOSPHATE: See also *trioritho*Cresyl Phosphate
excretion in pregnancy, [Krieger] 300—ab
in food, relation to effect of vitamins A and D, [Møllgaard] 382—ab
myocardium necrosis induced by orthophosphates, [McJunkin] 1983—ab
PHOSPHORUS, effect on fracture healing, [Haldeman] 1334—ab
in Blood: See Blood
metabolism, effect of diets on, 1857—E
metabolism in osteomalacia, [Hannon] 1411—ab
poisoning (acute), treatment, [Liebscher] 454—ab
PHOTO-ELECTRIC Dilator, Vestvold's, 992
PHOTOGRAPHIC illustration in medicine, [Creer] 1325—C
PHRENICECTOMY: See Tuberculosis, Pulmonary
PHYLAXIS, [Rubegni] 451—ab
PHYSICAL EXAMINATION of conscripts, Japan, 202
of Food Handlers: See Food handlers
periodic, A. M. A. form for, used by National Committee on Girls and Boys Club Work, 1239
required before marriage, England, 1864
PHYSICAL THERAPY: See also Arthritis, chronic
American Congress of, 498
education in, Pennsylvania, [Krusen] ★1944
hyperpyrexia induced by, [Bierman & Fishberg] ★1354
terms: physico-therapy; physical medicine, [Hirsh] 507—C
PHYSICIANS: See also Economics, Medical; Education, Medical; Ethics, Medical; Fees; Licensure; Malpractice; Specialists; Surgeons
adoption practices and, [Jenkins] ★403
avocations, art exhibit, New Jersey, 51
avocations, Hayden Etching Club exhibit, 845
avocations, hobbies, 903—ab
avocations, hobby exhibit (New Jersey) 51; (Minnesota) 999
avocations, poetry contest, Cleveland Academy, 926; (award) 1862
"biologic group" vs. nature cure movement, Berlin, 1164
Civilian Conservation Corps, 1318
confidential, Krankenkassen reorganized, Germany, 767
Congress of French-Speaking, 355; 498; 933
foreign, restriction, Czechoslovakia, 124
General Association of, France, 271
Graduate Course for: See Education, Medical, graduate
guild, Austria, 1790
in AMERICAN MEDICAL DIRECTORY, ★578; 611—E; (aged) 1782—E
in politics, candidates for Congress, Missouri, 1159
in politics, senators, Italy, 503
infection contracted, allowed compensation for, 502
insurance (life) companies and, Japan, 1322
legislator and, 1313—E
Military: See Military
of Alpine region, tenth convention, 1789
order of, Federation of Medical Associations, Brazil, 57
panel, Germany, 501; 692
practicing, family physician, 1753—ab
practitioner of future, [Herrick] ★881
socialistic, congress, Brno, 123
specializing in pathology, ★1230
statistics, Vienna, 1465
supply, increase, Czechoslovakia, 123
supply, number in German cities, 619
supply, overcrowding, England, 617
supply, ratio to population, U.S., ★577
supply, towns without, Connecticut, 1954
Tax: See Tax
Training: See Education, Medical
vacancy in health department, New York, 195
veteran, aged physicians in DIRECTORY, 1782—E
veteran, 50 years in practice, (St. Louis) 1785; (Xenia, O.) 1956; (Milwaukee) 1957
Women: See also Medicine, women in; Students, Medical, women
women, Jacobi fellowship for, 1863
women, Japan, 202
women, Medical Women's International Association, 1957
women, number, Great Britain, 1163
PHYSICO-THERAPY, [Hirsh] 507—C
PHYSIOLOGISTS, All-Union Congress of (fifth), 1552
Congress of French-speaking, 765
PHYSIOLOGY, fellowships in, 1786
PHYTOTOXIC Index: See Blood
PICK'S DISEASE, 702
pericardiectomy for, [Flick] 786—ab
PICTURES: See Illustration
PIEBALD: See Leukoderma
PIGMENT: See Bile; Retinitis
PIGMENTATION: See also Tanning
after bismuth therapy, 432
PIKE'S Centennial Salt Rheum Salve, 205—BI
PILOCARPINE Hydrochloride: See Dystrophy, muscular
PILONIDAL SINUS, 1090; 1645
PIN Oak: See Oak
PINEAL BODY contains estrogenic substance, 1626—E
PINEAPPLE, Cellu Juice-Pak, 189
Hawaiian, brands accepted, 919; 993; 1069; 1151; 1779
PINWORM: See Oxyuris vermicularis
PIONEER United Dairies Vitamin D Milk, 1623
PIPERAZINE: See Kidney calculi
PIRQUET Test: See Tuberculin test
PITRESSIN Test: See Epilepsy
PITUITARISM: See Pituitary Body
PITUITARY BODY, anterior lobe and male gonad, [Neumann] 147—ab
anterior lobe changes after x-ray irradiation, [Stöckl] 79—ab
anterior lobe, growth factor from, [Wyeth] 772—C
anterior lobe hyperactive in cancer, [Wyeth] 772—C
basophil adenoma, diagnosis, [Medvei] 1030—ab
basophilism (Cushing's), [Jamin] 794—ab
cachexia, Simmond's disease, [Herman] 1743—ab
carbohydrate metabolism and, [Davis] 1887—ab
deficiency, glandular dystrophy, 1558
Disease: See also Dystrophy, adiposogenital
disease, fat tolerance test in, [Goldzieher] 870—ab
disorders, pituitarism in neurologic practice, [Tucker] 297—ab
eclampsia involving, 1165
genital cancer and, [Busse] 148—ab
headache, [Skipp] 1569—ab
Hormone: See also Antuitrin
hormone, antihormones, 492—E; 1456—E
hormone (growth) in dwarfism, [Engelbach & Schaefer] ★464
hormone of anterior given after operation on female genitals, [Stöckl] 1997—ab
hormone of posterior on urea clearance, [Bjering] 956—ab
hormone (sex) in urine of old men, [Kukos] 534—ab
hyperpituitarism with hyperthyroidism, 1389
hypopituitarism, effect of gravidic urine extract, [Kunstadter] 445—ab
osteopoikilosis, [Nichols] 946—ab
posterior lobe, eclampsia and nephropathy, [Anselmino] 1897—ab
regulatory of carbohydrate metabolism, [Anselmino] 879—ab
rôle in hypothalamic vegetative syndrome, 930
PITUITARY EXTRACT: See also Antuitrin
anterior (acid extract) effect on thyroid, [Scowen] 2057—ab
anterior, effect on water elimination by kidneys, [Iversen] 1744—ab
anterior in vasoneurotic disorders, [Rudsit] 795—ab
anterior, reducing substance, [Salter] 1889—ab
hypophysine intravenously, [Reiles] 531—ab
stomach lesion produced by, [Dodds] 2057—ab
treatment of herpes zoster pain, [Gillett] 1105—ab
PLACENTA expulsion, Credé's method modified, [Karnicki] 531—ab
of Dionne quintuplets, 1398
praevia, toxic factor, [Nubiola] 1338—ab
site, location of, factor in normal delivery after cesarean section, (reply) [Hewitt] 2050
PLAGUE bacillus, cultivation, [Wright] 1739—ab
in ground squirrels, California, 115; (eradication) 265; 417
treatment, bacteriophage, [Eaton & Bayne-Jones] ★1934
vaccine (new) against, 1244
PLASMA: See Blood bilirubin; Blood cholesterol; etc.
PLASTER Casts: See Casts
industry, hazards, 62
PLASTIC Wood: See Wood
PLATELETS: See Blood
PLATO Syrup, 564
PLEE-ZING Strained Products, 111
PLEURA, blastomycosis, [Spreng] 1659—ab
disease, oleothorax in, [Capani] 792—ab
effusion (bloody) sign of lung cancer, 626
effusion cytology in pneumonia, [Scott] 1261—ab
effusion, Koranyi's sign, [Weiler] 1107—ab

PLEURA—Continued
effusion, therapy in artificial pneumothorax, [Starcke] 1109—ab
puncture, sero-albuminous expectoration after, [Mumme] 635—ab
suppuration, cerebral complications, [Cohen] 786—ab
PLEXUS: See Brachial Plexus; Choroid Plexus
PLUMBING: See Faucet handle
PLYMOUTH Dairy Co, Vitamin D Milk, 1623
PNEUMATIC DRILL: See Drill
PNEUMOCOCCUS antibodies, 1380—E
carriers, study, [Bliss] 786—ab
chain formation, [Bullowa] 1023—ab
immunization of human against, [Ross] 1408—ab
inhalation, specific agglutinins in serum after, [Stillman] 218—ab
mucosus, mastoiditis, caused by, 691
Pneumonia: See Pneumonia
quinine derivatives effect on, [Maclachlan] 1980—ab
type, in children, [Joppich] 534—ab
vaccines, skin reactions to, [de Bruin] 1806—ab
Pneumoconiosis: See Pneumonoconiosis
PNEUMOLYSIS: See Tuberculosis, Pulmonary, surgical treatment
PNEUMONECTOMY: See Bronchiectasis
PNEUMONIA: See also Bronchopneumonia
cause of death in, [Brooks] *1192
in children, cerebral and abdominal syndromes, 1720
lipoid, [Goodwin] 945—ab; [Grayzel] 950—ab
pleural effusions in, cytology, [Scott] 1261—ab
pneumococcus, mixed infections in, [Finland] *1681
pneumococcus, recurrences in, [Finland] 1261—ab
primary epidemic alveolar, [Rasmussen] 636—ab
Psittacosis: See Psittacosis
repeated, prophylaxis against, 1727
treatment, artificial pneumothorax, [Myers] *1304; [West] 125—C
PNEUMONOCONIOSIS, functional disability in, estimating, [McCann & others] *810
anthracosis (pulmonary), 2042
protection against dusts, 1543—E
silica as hazard in soap factories, 778
silica inhalation effect on normal and tuberculous lungs [Gardner] *743
silicosis, [Gudjonsson] 449—ab
silicosis in granite quarriers, [Bloomfield] 297—ab
silicosis, micro-incineration aid in diagnosis, [Irwin] 948—ab
silicosis or pulmonary fibrosis, 1472
silicotuberculosis, differential diagnosis, [Uehlinger] 878—ab
unable to produce in animals by inhalation, 851
PNEUMOPERITONEUM in perforation of gastric and duodenal ulcers, [Fernández Saralegui] 1814—ab
PNEUMOTHORAX, cerebral embolism after, [Renner] 1895—ab
giant excavation and emphysematous bulla mistaken for, [Karan] 1482—ab
spontaneous bilateral, [Geill] 226—ab
PNEUMOTHORAX, ARTIFICIAL: See also Pneumonia, treatment; Tuberculosis, Pulmonary, artificial pneumothorax in
[Myers] *1299
gas diffusion, [von Frisch] 1895—ab
pleural exudates in, therapy, [Starcke] 1109—ab
sterilization of needles for, 2050
POETRY contest of Cleveland Academy, 926; 1862
POGGI, ALFONSO, death, 688
POISONING: See also Aniline; Carbon Monoxide; Cyanide; Gasoline; Guanidine; Kerosene; Mercury; Mussels; Thallium; etc., under Medicolegal Abstracts at end of letter M
accidental, in childhood, [Aikman] *640
suicidal intent, 1868
POLAND Water Carbonated, 919
POLIOMYELITIS, acute anterior, in 1916 vs. 1932 Philadelphia epidemics, [Henry & Johnson] *94
acute anterior, 1934 California outbreak, [Geiger & others] *342
acute anterior, vaccination, [Kolmer] 525—ab, 1735—ab
acute epidemic, difficult swallowing, [Brahdy & Lenarsky] *229
acute, of brain stem, [von Kiss] 148—ab
anterior, overextension of muscles in, [von Puky] 1816—ab
bulbar, treatment, [Smith] 138—ab
cerebrospinal fluid diastase in, [Eckardt] 147—ab
diagnosis, recognizing aparalytic cases, [Nissen] 956—ab
epidemic, Greenland, [Hrolv] 956—ab
epidemic, precautions, Kansas City, Mo., 267
etiology, synergistic, 757—E
gastro-intestinal tract and autonomic nervous system in, 849—E
in California, 49; 115; 265; [Geiger & others] *342; 1239
POLIOMYELITIS—Continued
in Cuba, 688
incidence, U. S., 842—E; 1001
infection at swimming pool possible? 431
nostrum, fraudulent Warm Springs crystals, 1631
preparalytic stage, studies on, [Basstrup] 956—ab
second attack after 24 years, [Tesdal] 1032—ab
second attack of acute, [Moore] 950—ab
serum, restrict manufacture, California, 417
survey, Philadelphia, 763
treatment, autocerebrospinal fluid, [Török] 1414—ab
treatment, convalescent serum, 192—E; 262—E; [Schlossberger] 452—ab; 619; [Sokol] 622—C; [Fischer] 1482—ab
Vaccination: See Poliomyelitis, acute anterior vaccine, 264—E
POLISH registration law, new, 425
POLITICS and pensions, France, 1078
Physicians in: See Physicians
POLLENS, airplane survey, Philadelphia, 1076
extract injection in hay fever, 2038
extract, injection, reactions to; hay fever and asthma, 60
in New York area, 63
POLYARTERITIS: See Arteritis
POLYARTHRITIS: See Arthritis
POLYCYTHEMIA treatment, phenylhydrazine, [Vaquez] 1028—ab
vera, predisposition to thrombosis, [Jürgens] 157—ab
POLYNEURITIS: See Neuritis
POLYP, cecal, on occluded base of appendix, [Strauss] *182
nasal mucous, [Kern & Schenck] *1293
POPULATION: See also Gas warfare; Jews
European, in Dutch East Indies, 425
movement in Germany, 1960
of Vienna, 1248
PORK, incidence of trichinosis, 758—E
shoulder as pellagra preventive, [Wheeler] 375—ab
PORPHYRIN elimination in pregnancy, [Carrié] 1815—ab
PORTAGE Syrup, 1379
PORTAL VEIN obstruction (acute), causes of death after, [Elman] 294—ab
PORTER, CHARLES, death, 852
PORTLAND Milk Producers Vitamin D Milk, 919
POSITION: See Posture
POSTGRADUATE Training: See Education, Medical, graduate
POSTMORTEM: See Death; Necropsy; Rigidity
Injection of Lymphatics: See Lymphatic System
POSTURE, change, in appendicitis diagnosis, 703
changes effect on blood distribution, [Ude] 534—ab
reaction in vasoneurotic disorders, [Rudsit] 795—ab
POTASAFRAS, 204—BI
POTASSIUM in Blood: See Blood
POTENCY: See Impotence
POTT'S Disease: See Spine
POWDER: See Face powder
PRACTICE, MEDICAL: See Medicine, practice; Physicians, practicing
PRACTITIONER: See Physicians
PRECIPITATOR Ash: See Ash
PRECIPITIN Tests: See Streptococcus, hemolytic
PREECLAMPSIA: See Eclampsia
PREGNANCY: See also Abortion; Eclampsia; Embryology; Fetus; Labor; Obstetrics; Puerperal Infection; Puerperium
acid-base equilibrium in, [Botella Llusiá] 1894—ab
age of, histologic diagnosis, [Ryerson] 70—ab
age of; pregnancy at forty, 61
albuminuria contraindicate? 1175
anemia (chronic microcytic) of, and nutritional anemia of infancy, [Steen] 1657—ab
anemia of, 510
blood in, lipid composition of leukocytes, [Boyd] 1989—ab
blood sedimentation rate in, [Griffin] 1651—ab
blood serum calcium and phosphorus in, [Mull] 68—ab
Cancer Complicating: See Pregnancy, uterus cancer
Complications: See also Pregnancy, tumors complicating; Pregnancy, uterus cancer
complications, acute yellow atrophy of liver, [Stander] 783—ab
complications and reduction of premature infant mortality, [Clifford] *1117
complications, cardiac, [Pardee] *1899
complications, cardiovascular and renal disease, [Herrick] *1902
complications, diabetes Insipidus, 432
complications, hypertension, 1011; (essential) [Seitz] 1997—ab
complications, hyperthyroidism, 1970
complications, influenza with encephalitis in child, [Stewart] 1735—ab
complications, neuronitis without vomiting, [Maisel & Woltman] *1930
PREGNANCY—Continued
complications, optic nerve and retina lesions, [Wagener] *1910
complications, pyelitis, ureteral catheterization, [von Mikulicz-Radecki] 456—ab
complications, tuberculosis, [Pottenger] *1907
dental caries and, 694; 1473; 1972
Diagnosis: See also Pregnancy, extra-uterine diagnosis, Aschheim-Zondek test, red rays irradiation in, [Mandelstamm] 722—ab
diagnosis, Dowell test, 310; 1015
diagnosis, fish test for hormones in urine, [Kanter & others] *2026
diagnosis, Friedman test, [Goldberger & others] *1210
diagnosis, Kapeller-Adler reaction, [Ohligmacher] 1030—ab
diet (high vitamin) in, [Vogt] 1578—ab
disturbances, [DeLee] *308
extra-uterine, [Echols] *1686
extra-uterine, bilateral tubal, [Stahel] 1813—ab
extra-uterine, chorionic cancer after ruptured tubal, [Thomas] 1637—ab
extra-uterine (dead), Aschheim-Zondek test in, [Spitzer] 1110—ab
extra-uterine, Friedman test in, [Goldberger & others] *1210
extra-uterine, interstitial diagnosis, [Drazancić] 796—ab
extra-uterine, pupillary sign in ruptured ectopic, [Salmon] 1098—ab
extra-uterine, trophoblast activity and Aschheim-Zondek test, [Kaplun] 1110—ab
fall during, relation to premature labor, 63
hygiene, relation to maternal-infant mortality, [DeNormandie] 1809—ab
hygiene, standards of prenatal care, 416—E
in patient with one kidney, 859
Interruption: See Abortion
leukorrhea in, 778
mineral needs and maternal nitrogen, [Macy] 522—ab
Multiple: See Quintuplets; Twins
phosphate excretion in, [Krieger] 300—ab
porphyrin elimination in, [Carrié] 1815—ab
quinine used during, wise? [Buddee] 529—ab
roentgen diagnosis of intra-uterine death of fetus, [Brakemann] 878—ab
syphilis in, 208; 511; (treatment) 698; [Kolbe] 878—ab
terminating, action of estrin in, [D'Amour] 526—ab
toxemia (late), magnesium sulphate intravenously, [McNeile] *548
toxemia, renal function in, [de Snoo] 1493—ab
toxemia, Takata reaction in, [Neuweller] 1816—ab
tumors complicating, hydatidiform mole, [Sommer] 879—ab
tumors complicating, myoma praevium, [Koller] 723—ab
Urine: See also Pregnancy diagnosis
Urine Extract: See also Antultrin S; Follutein
urine extract, antihormones, 492—E
urine extract, testicle injured by, [De Jongh] 536—ab
urine in Dorn-Sugarman sex prediction test, [Murphy] 870—ab
urine, pituitary-like principle in chorionepithelioma, [Leventhal & Saphir] *668
urine pituitary principle and hyperglycemia, [Davis] 217—ab
uterus cancer during, radium irradiation, [Hofmann] 1188—ab
uterus cancer with 8 months' pregnancy, [Miller] 1182—ab
vasomotor rhinitis and allergy, 1471
vitamin C and, [Vogt] 78—ab
vomiting of, blood chlorides in, [Kretzschmar] 1744—ab
vomiting of, genesis, [Schultze-Rhonhof] 1492—ab
PRENATAL CARE: See Pregnancy hygiene
PRESCRIPTIONS: See also under Medicolegal Abstracts at end of letter M
measuring, 282
metric equivalent of teaspoons, 1457—E
PRESIDENT Brand Table Syrup, 1229
PRESSURE, Intra-abdominal: See Abdomen
Negative: See Blood Vessels, disease; Endarteritis
PRISMS, in orthoptic training, [Guibor] *916
PRISON physicians, [Jones] 206—C
PRISONERS: See also Criminals
of war, treatment, 1007
PRIVILEGED COMMUNICATIONS: See under Medicolegal Abstracts at end of letter M
PRIZES, A. M. A. Committee on Awards, Cleveland, 47
Academy, Japan, 202
Albert Medal of Royal Society of Arts, 500
Alvarenga, 417
American Association for Study of Goiter, 1863
American Legion award, 416—E; 496
Bell (Mary Ellis), 51
Cameron, 1077
Capps (Joseph A.), 116
Clark (John C.), 51

PRIZES—Continued
Cleveland Academy of Medicine, poetry, 926; 1862
Fiske, awarded, 52
health contest (interchamber), 688
Horsley (John) Memorial, 52
International Foundation of Gynecology and Obstetrics, 1002
Laetare Medal, 761
Lombroso, 57
New Jersey Health and Sanitary Association, 1629
New York Academy of Medicine, 1955
Nobel (in medicine), 1382—E; 1387; (in chemistry) 1785
Priestly (Graybe Simpson), 51
Rosenberger Medal, 1458
Rumanian Medical Academy, 1635
Saunders Memorial Medal, 1243
Sedgwick Memorial Medal, 1240
Stacy (James E.), 350
State Medical Society of Wisconsin gold seal, 927
Umberto I orthopedic, 420
University of Bern for encephalitis research, 1001
University of Buffalo medal in ophthalmology, 1459
Ward-Burdick Medal, 196
Wellcome Medal and Prize, 197
Williams (Dawson), 53
Woman's Medical College of Pennsylvania, gold medals, 196
PROCAINE borate, Tablets Procaine Borate and Epinephrine, 1708
Epinephrine Solution (Abbott), 1067
Hydrochloride: See also under Anesthesia; Phlebitis
hydrochloride blocking to influence trophic processes, [Vishnevskiy] 149—ab
Hydrochloride Hypodermic Tablets (Abbott), 1067
injections, palpitation and nervousness after, 860
Neo-Synephrin Hydrochloride Hypodermic Tablets, 917
PROCTITIS: See Rectum
PROCTOCLYSIS: See Rectum
PROCTOLOGY, American Board on, A. M. A. resolution on, 44
PRODIGIOSUS toxins (Coley), Council report on, 1067; 1070—E
PROFESSORS honored, Soviet Union, 1552
PROGNOSIS: See under specific diseases as Arteriosclerosis; Heart disease
PROGYNON in amenorrhea and menstrual irregularities, 1011
PROSTATE: See also Urethra, prostatic
abscess, gonorrheal, in 4 year old, [Fox] *748
aerocystography, [Ross] 875—ab
cancer, [Ewell] 288—ab; [James] 1657—ab
cancer, adenocarcinoma metastasis to vertebral column, [Dickson] 74—ab
hypertrophy, new shrinkage method for, [Kirwin] 1987—ab
infection, diagnosis, 1170
inflammation: See Prostatitis
resection (transurethral electro), intravesical explosions complicating, [Kretschmer] *1144
surgery, transurethral, [Caulk] 216—ab
tumor, sarcoma, [Lowsley & Kimball] *983
PROSTATECTOMY: See also Prostate, resection
suprapubic, defense of, [Keyes] 1085—C; (reply) [Young] 1086—C; (correction) 1243
suprapubic, trigonal loop traction in, [Lumb] 1892—ab
suprapubic, with immediate bladder closure, drainage after, [Haynes] *174
PROSTATITIS, chronic, [Stutsman] 288—ab
chronic, diagnosis and treatment, 1090
postgonorrheal, 1970
PROSTIGMINE, therapeutic action, [Carmichael] 143—ab
PROSTITUTION, Germany, 1634
legislation, Irish Free State, 848
licensed, abolished, Japan, 202
PROTEIN action (specific dynamic), [Högler] 795—ab
diet in hypertension, 937
diet requirements, 620
digestion vs. that of carbohydrates, [Rehfuss] *1600
economy in oxygen deficiency, [Elias] 1340—ab
in Blood: See Blood
in Urine: See Albuminuria; Urine
nature of antibodies, 1380—E
relation to osmotic pressure of serum and of lymph, 1952—E
Therapy: See Gonorrhea
tissue, composition, 756—E
PROTEO BREAD, 992
PRUNES, California Educational Advertising, 1453
strained, brands accepted, 111
Sunsweet Juice, 993
PRURITUS ani, salicylic acid in alcohol for, [Creech] 873—ab
ani, x-rays for, 128
balnea, 509
PRURITUS—Continued
icteric, 2047
vulvae, alcohol injection for, [Wilson] 1025—ab
PSEUDARTHROSIS, congenital, of leg, bone graft for, [Colonna] *2012
PSEUDO-ANGINA PECTORIS originating in cervical spine, [Nachlas] *323
PSITTACOSIS, 282
in Germany, 273; [Gutzeit] 1494—ab
vaccination, [Rivers] 870—ab
PSORIASIS, in tropical countries, [Pardo-Castello] 206—C
treatment, low fat diet, 56; [Grütz] 793—ab
treatment, roentgen, [Rosh] 946—ab
PSYCHIATRISTS to Board of Education, examination for, New York City, 1629
problem of expert witnesses, France, 1003
therapeutic abortion indications from standpoint of, [Cheney] *1914
PSYCHIATRY, American Board of, organized, 1547; 1717
clinical, and eugenics, 1164
Connecticut Society of, formed, 495
Deutscher Verein für Psychiatrie, 1164
studies at U. of Colorado under Rockefeller Foundation, 843
PSYCHOANALYSIS, convict Mrs. Mayer, 351
literature on case work in, 436
Society (first), Rumania, 425
PSYCHONEUROSIS, relation to migraine and epilepsy, [Paskind] 785—ab
treatment in general practice, [Smith] *1111
PSYCHOSIS: See also Dementia Praecox; Insanity; Mental Disease
in pernicious anemia, 1529—ab
of cyanide gas poisoning, 858
respiration in, [Paterson] 377—ab
PTERYGIUM in papyrus Ebers, 858
PTOSIS: See Eyelids
PUBERTY: See Adolescence
PUBLIC HEALTH: See Health
PUERPERAL INFECTION, [Martland] 1807—ab
prevention; treatment, practical measures, [Watson] *1745
PUERPERIUM, cervical erosions, etc. in, [Barrett] *1516
gynecology in, 2030—E
hemorrhages, treatment, [Siedentopf] 224—ab
lipid composition of leukocytes in, [Boyd] 1989—ab
PULSE, throttling, effect on blood pressure, [Wolf] 723—ab
PUNCTURE: See Arteries; Cisterna Magna; Pleura; Spinal Puncture
PUPILS, area vs. retinal sensibility, [Lucklesh] 631—ab
Dilating: See Mydriatics
sign in ruptured ectopic pregnancy, [Salmon] 1098—ab
PURGATION: See Cathartics
PURKINJE, JOHANNES, invention of histologic technic, 1583—ab
PURPURA, diagnosis and treatment, 773
haemorrhagica, diagnosis; treatment, [Pemberton] 371—ab
haemorrhagica, thrombopenic, with stomach cancer, [Lawrence] 291—ab
simplex, 1560
PUS: See also Infections, pyogenic
in Urine: See Pyuria
reaction, in lungs disease, [De Blasi] 301—ab
PYELITIS granularis cause of renal pelvis hemorrhage, [Ottow] 1661—ab
of pregnancy and ureteral catheterization, [von Mikulicz-Radecki] 456—ab
or appendicitis with otitis media, 1252
therapeutic abortion in, [von Mikulicz-Radeckl] 1662—ab
PYELOGRAPHY, injection of perirenal lymphatics, [Abeshouse] 1406—ab
PYELO-URETEROGRAPHY, improved, [Howard] 72—ab
PYLORUS obstruction, gastric lavage in, [Freeman] 448—ab
spasms, treatment, 1246
stenosis in infants, Ramstedt's operation, [von Haberer] 381—ab
PYODERMIA: See also Carbuncle; Furunculosis
isolated chancre-like facial, [Hoffmann] 1742—ab
PYRETHRUM sensitization complicating hay fever, [Kampmeier] 205—C
PYRIDIUM: See also Gonorrhea vaginitis
hydrochloride, pharmacology, [Walton] 445—ab
PYURIA, chronic, ketogenic diet in, [Rector] 873—ab
treatment, acidosis, [Plum] 80—ab

Q

QUACKERY, regulation, Japan, 1553
QUAKER BRAND (gelatin), 993; (chocolate), 1539
QUALITY Dairy Vitamin D Milk, 1069
QUARANTINE: See also Scarlet Fever
Farms: See Tuberculosis, bovine
rules modified, New York, 686
QUARRIES: See Granite
QUARTZ, Cold Quartz Lamp: See Ultraviolet Rays
response of peritoneal tissue to, [Miller & others] *909; *911
QUINCKE'S DISEASE: See Edema, angioneurotic
QUINCY Brand Chocolate, 260
QUINIDINE: See Ventricular Fibrillation
QUININE: See also Labor, induction
antenatal use, [Buddee] 529—ab
derivatives, effects on pneumococcus, [Maclachlan] 1980—ab
eruption from contraceptive, [Ford] *483
idiosyncrasy and agranulocytic angina, [Fitz-Hugh] 1099—ab
intravenous use, 2050
Treatment: See Sclerosis, multiple
Urea Injection: See Hydrocele
QUINTUPLETS, antiquity, [Walsh] 1010—C
Dionne, [Dafoe] *673; 684—E; 1398

R

R. O. T. C.: See under Army, U. S.
RABBIT Fever: See Tularemia
RABIES among foxes, 614
death from, (California), 193; (New York City), 762
incubation period in dogs, 208; 436; 1726
transmission by dog vaccinated, 282
Vaccine (Cumming), 917
vaccine, efficacy, 937
Vaccine (Human), (Chloroform Killed)—National, 1309
Vaccine (Phenol Killed)—Mulford, 1708
RACES: See also Negroes; etc.
Aryan and Nordic myths, 764
RADIANT energy, source, [Laurens] *1447
Heat: See Heat; Infra-Red Rays
RADIATION, Mitogenetic: See Cells
Therapy: See Cancer, treatment; Esophagus cancer
RADICULOMENINGOMYELITIS: See also Meningo radiculitis
[Christiansen] 880—ab
RADIO, A. M. A. expresses appreciation to N. B. C., 1239
control of medical broadcasts, Canada, 1958
in education, National Advisory Council, 1310—E; [Parran resigns] 1715
medical consultations on the high seas, 2042
noise, protection against, 766
treatment of disease, 1718
RADIOLOGISTS, A. M. A. resolution on exploitation by hospitals, 45
RADIOLOGY, Departments of: See Hospitals
Institute in Madras, 420
International Congress of (fifth), (A. M. A. invites), 45; 1243
Radiological Society of North America, 928
RADIOSENSITIVITY, problem, [Cutler] *1204
RADIOTHERAPY: See Furunculosis
RADIOTHERMY: See Short Waves
RADIUM center in Colombia, 688
Cone No. 3, 1084—BI
Emanation: See Radon
gamma-ray, effect on wound healing, [Nathanson] 528—ab
gamma ray therapy, dosage system, [Paterson] 1810—ab
history, Madame Curie's achievements, 1633
implantation in cervix, ureteral occlusion after, [Bugbee] 1987—ab
importations, U. S., 1161
irradiation cataract, [Milner] 1657—ab
irradiation, intra-uterine, hydrometra after, [Vogt] 1495—ab
jacket in breast cancer, [Richards] 1570—ab
National Radium Trust and Radium Commission, fifth annual report, 1718
pack, 4 Gm., [Cutler] *1209
stolen, Ohio, 614
Treatment: See also Nipple, bleeding; Thyroid tumor; Uterus cancer; Uterus hemorrhage
treatment, indiscriminate, American Radium Society condemns, 1077
treatment, necrosis after, [McCoy] 951—ab
workers, protection, 1548; 2038
RADIUS, fractures of anterior edge of lower end, [Rousseau] 1106—ab
fracture (transverse) of neck, [Patterson] 713—ab (correction), 956
Reflex: See Reflex
RADON: See also Uterus cancer
ingestion, health dangers, [Barker] 214—ab
intravenously, action on blood, [Nemenow] 1495—ab
protection against, 1548
RAFFELSON, AARON W.,—impostor, 1724—BI
RAGWEED dermatitis, [Brunsting & Anderson] *1285
Mixed Ragweed Pollen Extract (Swan-Myers), 110
sensitivity to, 1012
RAILWAY Accidents: See Accidents
Surgeons: See under Surgeons
RAMISECTOMY, [Pfeiffer] 1889—ab
RAMON, G., assistant director of Pasteur Institute, 1960
Toxoid: See Diphtheria
RAMÓN y CAJAL, 1461; 1541—E
RAMSTEDT'S Operation: See Pylorus stenosis
RAT exterminators, poisons in, [Aikman] *641
RAWLEIGH'S Rheumatic Tablets, 429—BI
RAYNAUD'S DISEASE or scleroderma, 1558

RAYS: See also Infra-Red Rays; Radiant Energy; Radium; Red Rays; Roentgen Rays; Ultrared Rays; Ultraviolet Rays; etc.
borderline (Bucky's), treatment of asthenia, [Backmund] 794—ab
borderline, therapy in dermatology, [Dorne] 524—ab
REAGIN, anticerebral, in spinal fluid in dementia paralytica and tabes [Demanche] 1265—ab
REBATES and commissions, surgical trade code forbids, 1071—E; [Hovey] 1088—C
RECKLINGHAUSEN'S DISEASE: See Osteitis
RECTUM, absorption of food from, 1327
administration by, continuous proctoclysis, 1391
Anesthesia by: See under Anesthesia
cancer in youth, [Ross] 521—ab
complications of pelvis irradiation, [Jones] *1678
deformity, with pain after repeated infection, 699; 1256
excision (perineo-abdominal), [Gabriel] 790—ab
Fistula: See Fistula
prolapse, phenol in almond oil injection for, [Morley] 1027—ab
prolapsed, treatment, [Warren] 527—ab
proliferating and stenosing proctitis, 1549; [Gatellier] 1812—ab
stricture, Krukenberg tumor producing, [Runyeon] *1199
Suppositories: See Dilaudid
Vestvold's Photo-Electric Dilator for applying heat by, 992
RED & WHITE Brand strained products, 919
RED CROSS, American, annual report, 1631
in Luxemburg, 424
International Congress, Tokyo, 202
RED PLUME Brand Syrup, 564
RED RAYS: See also Infra-Red Rays; Ultrared Rays
irradiation in Aschheim-Zondek test, [Mandelstamm] 722—ab
RED W Brand Golden Syrup, 260
REDUCER: See Obesity treatment
REFLEX, gag, in tonsillectomy, 513
oculopharyngeal, [Di Sorrentino] 877—ab
pain from prostatic urethra, 281
radius, inversion, [Johnsson] 1818—ab
temporal, and blood pressure, [Vermel] 79—ab
winking, opticofacial, [Weingrow] 787—ab
REFRIGERATION (electric) service man, continuous exposure to sulphur dioxide, 362
REGENERATION: See Bone; Periosteum
REGURGITATION: See Aortic Valve; Bladder
REID'S Union Dairy Vitamin D Milk, 1151
REITER'S Dairy Co. Vitamin D Milk, 1623
RE-JOYCE Brand Strained Products, 111
REJUVENATION fraud, Clayton E. Wheeler, 1044—BI
RELIEF: See Emergency
RENAL Dwarfism: See Dwarfism
RENKEN (M. H.) Dairy Co. Vitamin D Milk, 2029
RESEARCH: See also Animal Experimentation; Cancer; Heredity; National Research Council; etc.
A. M. A. grants for research, 1953
American Academy of Arts and Sciences, grants for, 1957
clinical, at Guy's Hospital, 1549
medical, Crossman memorial, 1318
Quarterly Scientific Journal devoted to, 1962
versus practice; individualism in practice, [Herrick] *882
RESISTANCE: See also Capillaries; Infection
power of organism in surgical practice, [Schürer-Waldheim] 1575—ab
RESORPTION: See Arsenic; Insulin
RESPIRATION: See also Dyspnea
altitude effect on, 1781—E
Artificial: See also Resuscitation
artificial, [Poe] 430—C
artificial, shoulders pressed downward in, [Jellinek] 722—ab
carbon dioxide hyperventilation, [Beecher] 1989—ab
Cheyne-Stokes, [Hill] 1811—ab
depression, calcium as antidote to, 1475
in psychotic subjects, [Paterson] 377—ab
inspiratory distention relation to emphysema, [Prinzmetal] 712—ab
therapy in pulmonary tuberculosis, [Hofbauer] 1893—ab
RESPIRATORY EXCHANGE: See Metabolism
RESPIRATORY TRACT: See Bronchus; Lungs
Disease: See Colds; Pneumonia; Pneumonoconiosis; etc.
RESUSCITATION: See also Respiration, artificial
[Henderson] *750: *834
Davis Inhalator, 1946
electrocardiographic control, [Bruns] 1186—ab
Foregger Infant Resuscitation Outfit, 677
RETICULOCYTES, response to commercial liver extracts, [Dameshek & Castle] *802
staining, cresyl blue, [Osgood] 714—ab
RETICULO-ENDOTHELIAL SYSTEM, function test, congo red, in osteo-articular tuberculosis, [Rabboni] 532—ab
origin of white blood cells, [Wiseman] *1524
rôle in deposition of colloidal and particulate matter, [Kuhns & Wetherford] 1883—ab
rôle in fibrinogen formation, [Held] 1108—ab
RETINA, detachment, 2040
detachment, diathermy for, [Schoenberg] 72—ab
detachment, treatment, [Šafář] 442—ab
lesions in chronic glomerular nephritis, [Cannady & O'Hare] *6
lesions in pregnancy, [Wagener] *1910
sensibility vs. pupillary area, [Luckiesh] 631—ab
tumor, hereditary glioma, 2040
RETINITIS, albuminuric, [Magitot] 1658—ab
pigmentosa, treatment, Imre (inhaling amyl nitrite), 1014
von REUSS, AUGUST, summoned to Vienna, 1466
RHEUMATIC FEVER, acute, dissociation of streptococci from, [Howell] 871—ab
acute, ST segment of electrocardiogram, [Easby] 868—ab
Aschoff body in, [Gross] 783—ab
chronic, [Swift] 949—ab
cutaneous lesions in, [Chester] 867—ab
lymphatic leukemia resembling, [Sutton] 872—ab
tuberculous bacillemia and, [Meersseman] 634—ab
RHEUMATISM: See also Arthritis
Acute Articular: See Rheumatic Fever
acute, blood alterations in, [Pezharskaya] 382—ab
acute, coronary endarteritis in, [Fraser] 1990—ab
acute, study of, 55
arteritis and nodes, [Harbitz] 1416—ab
Cardiac Complications: See Heart disease; Heart inflammation
Conference on Rheumatic Diseases (third), 1732; 1801; 1883
cutaneous nodules, [Rosenberg] 1262—ab
in children, acid metabolism in, [Payne] 1265—ab
in children, factors that influence, [Kaiser] *886
infection of kidney, [Pallíov] 1268—ab
International Conference on Chronic Rheumatism, Savoy, 1079
International Congress on, Moscow, 768; 1081
nostrum, Tanlac, 429—BI
pathogenesis, [Eyger] 149—ab
treatment, bee venom, [Schwab] 79—ab
treatment, histamine, [Shanson] 530—ab; [Mackenna] 530—ab
treatment, scarlet fever antitoxin, [Eason] 1991—ab
tuberculous, [Brav] 1654—ab
RHINITIS, hyperesthetic, and asthma; hypersensitivity, 1251
vasomotor, and pregnancy, 1471
RHINOLARYNGOLOGY, roentgen therapy, indications, 1552
RHYTHM: See Heart
RIBS fracture, interstitial emphysema after, 514
fracture, treatment, 623
RICE, Comet Brown, 1379
Jewel, 1379
RICHMOND Academy of Medicine, approves hospital insurance report, 52
RICKETS, epiphyseal cartilages changes in, [Dodds] 867—ab
hereditary nature, Germany, 1005
hypervitaminosis D, vitamin D in, [Ham] 1337—ab
prevention; treatment, vitamin D milks, [Lewis] 874—ab
renal, [Svensgaard] 1744—ab
RIDER'S Vitamin D Milk, 1069
RIGIDITY, postmortem, 1644
RINGER'S SOLUTION, preparation; indications for injecting, [Hartmann] *1350; *1352
RINGWORM, eczematoid infections, 1796
of hands and feet, 208
of nails, [Fantus] *832, (reply) [White] 1376
of scalp, thallium acetate for, [Davidson] 373—ab
treatment, [Fantus] *832
various eczema with, 1396
RITTER Tomato Juice, 1069
RIVERVIEW-Damascus Vitamin D Milk, 919
ROANOKE Dairy Vitamin D Milk, 1709
ROBINSON, THOMAS HENRY, JR., look out for, 1787
ROCKEFELLER Foundation: See Foundations
Institute, (changes) 614; (diseases being studied) 1316
ROCKY MOUNTAIN Spotted Fever: See Spotted Fever
Tuberculosis Conference, 685
ROENTGEN RAYS, action on diseased human thyroid, [Sunder-Plassmann] 1338—ab
American Roentgen Ray Society, 846
demonstration of abnormally short leg, [Bamberger] 1267—ab
Diagnosis: See Aneurysm: Hemophilia; Ileitis; Lungs abscess; Spine disease; etc.
endocrine stimulation, [Lehmann] 1740—ab
ROENTGEN RAYS—Continued
Fricke-Glasser X-Ray Dosimeter, 1946
German Roentgen Society, 271
irradiation: See also Pelvis; Pituitary Body
irradiation, bone tissue after, [Dahl] 536—ab
irradiation cataract, [Milner] 1657—ab
irradiation, recuperation of human skin after [Duffy] 1890—ab
localization with feeding tube of gastric foreign bodies, [Tucker] *1440
protection of workers, 1548
Victoreen r-Meter, 1946
ROENTGENKYMOGRAPHY: See Aneurysm, aortic; Heart
ROENTGENOGRAMS: See also Maxillary Sinus
necropsy, [Bowen] 1264—ab
processing, at high temperatures, [Farthing] 1890—ab
real and apparent in, 271
ROENTGENOGRAPHY: See Pyelography; Urography; under specific organs as Bladder; Gallbladder; etc.
ROENTGENOSCOPY: See Appendix
ROENTGENOTHERAPY: See also Angina, agranulocytic; Encephalitis, Epidemic; Hay Fever; Hyperthyroidism; Lips cancer; Meningitis; Pruritus; Psoriasis; Rhinolaryngology; Spine arthritis; Tonsils; Uterus, hemorrhage; etc.
technic, modified Coutard, [Martin] 788—ab
ROMAGOSA, ERNESTO, death, 1791
ROOSEVELT, FRANKLIN D., on social insurance, 609—E; 1624—E
on care of sick, 1953
ROSEDALE Dairy Vitamin D Milk, 1709
ROSS, CLARA, Inc., 1873—BI
ROSS, RONALD, memorial, 422
ROTOR for dispersing blood cells, [Bryan & Garrey] *1059
ROUGE, Jeweler's: See Jeweler's
ROUNDWORMS: See Ascariasis
ROUX, Dr., monument to, 931
ROWE, ALLAN W., death, 1860
ROYAL Table Queen Bread, 1379
RUMANIAN Faculty of Medicine: See Schools, Medical
RUPTURE: See Appendix; Ear; Fetus membranes; Intestines; etc.
RURAL Health: See Health
Practice: See Medicine practice
RUSSIA, foreign letter from, 768; 1551
training of physicians in, official decree, [Swanish] *1798
RUSTER Dairy Co. Vitamin D Milk, 1623
RUŽIČKA, VLADISLAV, death, 124

S

SACRO-ILIAC synchondrosis, subluxation of, 1874
SAFETY Lanes: See Automobile accidents
ST. JOHN'S (L.I.) Magnetic Brand Oil, 429—BI
ST. LOUIS Epidemic: See Encephalitis, Epidemic
SALICYLATES: See Acid, acetylsalicylic; Acid, salicylic
Bismuth: See Verruca treatment
SALIVA, action on diphtheria bacilli, [Dold] 454—ab
blood group ferment in, [Satoh] 303—ab
SALMON, story of, promotional advertising, 1453
SALMONELLA Infections, sporadic, [Smith] 1991—ab
SALT: See also Sodium chloride
Iodized: See Iodized salt
loss in perspiration, 282
tablets in drinking water in heat exposure, 1644
Worcester, 261
SALT LAKE Milk Producers Assn. Vitamin D Milk, 1623
SALVE: See Burns; Wounds
SALYRGAN, idiosyncrasy, [Sundaram] 60—C
SAMOS Brand Syrup, 1379
SAN DIEGO Central Clinic Service, 923—ME
SANATORIUM: See Tuberculosis
SANFORD'S Vitamin D Milk, 1623
SANITARY aid furnished by nonbelligerents, 1007
cities and localities, organization, 1007
Dairy Co. Vitamin D Milk, 2029
Farm Dairies Vitamin D Milk, 1709
Farms Dairy Vitamin D Milk, 1623
laws, cabinet approves, Italy, 1868
SANITATION of lumber camps, New Hampshire, 1385
draining marshes in Agro Pontino, Italy, 1962
of garbage, 2050
programs, Indiana, 495
SANIWAY Cups for menstruation, 130
SANKA Coffee, 1623
SANTONIN: See Ascariasis
SARATOGA SPA laboratory, 1075
SARCOMA: See also Liposarcoma; Lymphosarcoma; Osteochondrofibrosarcoma; under organs as Bones; Prostate; Spleen
heterologous transplant, 695
Hodgkin's disease, or infection, [Krumbhaar] 1979—ab
metastases, bone formation in, [Harding] 1097—ab

SARCOMA—Continued
or giant cell tumor, 361
pathogenic principle, 199
spindle cell, of kidney, [Watson & Russum] ★1700
trauma of uveal tract followed by, [Stieren] ★311
treatment, Coley's erysipelas and prodigiosus toxins, Council report, 1067; 1070—E
SARCOSPORIDIA in myocardium of premature infant, [Hertig] 292—ab
SAUNDERS, F. A., death, 1962
SAVOY Pineapple, (juice) 919; (crushed) 1151
SAXOPHONE player, bronchial asthma in, 1643
SCALENIOTOMY: See Tuberculosis, Pulmonary
SCALP, avulsion, treatment, 357
hemostasis, instrument for applying Michel clips, [Bailey] ★562
Ringworm of: See Ringworm
SCARLET FEVER after picnic, Catskill, N. Y., 418
air borne spread, 1013
Antitoxin: See also Rheumatism, treatment; Scarlet Fever, treatment
antitoxin, Arthus phenomenon, [Ross] ★563
carriers, tracing, 1014
Dick test in children, [Earle] ★336
immunization by nasal route, [Friedman] 1889—ab; (correction) 2058—ab
immunization (combined toxoid) against diphtheria and, [Tsen] 539—ab
immunization, desensitize a 5 year old girl for, 703
immunization, prophylactic, efficacy, [Mommsen] 1578—ab
immunization, toxin (formolized), [Dick & Dick] ★1362
immunization, toxoid, [Daniel] 219—ab; [Nesbit] 523—ab
immunization, Veldee's toxoid, [Dick & Dick] ★1364
in Milwaukee, Wis., 1547
quarantine, 433
quarantine reduced, New York City, 195
Schulz-Charlton reaction, 624
secondary case and quarantine, [Hoyne & Bailey] ★1051
Streptococcus Toxin for Skin Test-P. D. & Co., 917
Toxoid: See also Scarlet Fever, immunization
toxoid, is there? [King & King] ★1362
toxoid, toxicity, [Nagata] 75—ab
transmission: spread, 208
treatment, antitoxin vs. none, [Lucchesi & Bowman] ★1049
treatment, serum, [Mommsen] 1578—ab
trend, 682—E
SCARLET RED Salve, 205—BI; (Council report) 1778
SCHICK Test: See Diphtheria
SCHILLER Park Dairy Vitamin D Milk, 1623
SCHILLING Hemogram: See Leukocytes
SCHISTOSOMIASIS of bladder, frequency, Fezzan, 503
SCHIZOPHRENIA: See Dementia Praecox
SCHNELLER, MAX R., returned to prison, 1159
SCHOLARSHIPS: See also Fellowships
research, and B M A grants, 617
SCHOOLS: See also Children, school; University; under Medicolegal Abstracts at end of letter M
colonies, goiter in children of, 502
for children with trachoma, 1787
normal, mental hygiene survey, Massachusetts, 1384
open-air, first, in Netherlands, 502
SCHOOLS, MEDICAL: See also Education, Medical; Graduates; Students, Medical; under names of specific schools
American, teaching of gastro-enterology in, [Andresen] ★537
Association of American Medical Colleges, 1161
by states, ★571
description, ★580
foreign, U. S., citizens enrolled in, ★575; ★576; ★577
graduate, British, 421
graduate courses for physicians offered by, ★587
graduate, Jerusalem, 1161
history, Rumanian Faculty of Medicine, 1635
hospital facilities, ★577
hospitals (municipal) cooperation with, England, 617
in U. S. 1905-1934, ★573; ★574
inspiration, 1372—ab
internship required, ★571; ★572
London, 1349
Negroes in, ★574; ★575
new, at Formosa Imperial University, Japan, 1553
resurvey (comprehensive) U. S., ★565; 612—E
statistics of approved, ★566; ★571
tuition and other fees, ★574; ★575
SCHULZ-Charlton Reaction: See Scarlet Fever
SCHWABACH'S Test: See Hearing
SCIATICA pain, relief of, 1475
SCIENCE: See also Research
Academy of: See Academy; American; Missouri
SCIENCE—Continued
American Association for Advancement of, 52; 1958
British Association for Advancement of, 1163
distinction between art and, 1847—ab
methods a modern development, 563—ab
U. S. Science Advisory Board, physicians named to, 269
writers, National Association of, 1076
SCIENTISTS, Jewish: See Jews
SCILLONIN (N. N. R.) 1708; 1947
SCISSORS: See Diathermy
SCLERODERMA or Raynaud's disease, 1558
calcium metabolism and, [Paggi] 877—ab
SCLEROSIS: See also Arteriosclerosis; Corpora Cavernosa; Liver cirrhosis
amyotrophic lateral, etiology, [Dawidenkow] 535—ab
multiple, heat also quinine treatment, 280
multiple, in pernicious anemia, 127
multiple, liver function tests in, 1866
multiple, spastic paraplegia, [Winkelman & Eckel] ★662
therapeutic, induced with glycerin, 1173
SCOLIOSIS: See Spine curvature
SCOPOLAMINE: See under Anesthesia
SCROTUM, filariasis, [Young] 1655—ab
hydrocele, [Roller] ★671
ring of Domrich, 1868
SCURVY: See also Acid, cevitamic; Vitamin C
blood clotting and, 264—E
follicular lesions, [Scheer] 1022—ab
subclinical, diagnosis, capillary resistance test, [Greene] ★4
treatment, vitamin C injection, [Blauke] 1187—ab
SEA ISLAND Brand Pineapple, 1069
SEALE, A. C., death, 852
SEBACEOUS GLANDS cysts, 1646
hypersecretion, 509
SEBORRHEA: dermatitis, treatment, 1172
SECRETARIES: See Societies, Medical
SEED: See Caraway Seeds
Warts: See Verruca
SEFCIK Vitamin D Milk, 1069
SEMEN, blood in, 1328
stains, identifying after gunshot wound of pelvis, 1255; (reply; postmortem ejaculation) [Lefkowitz] 1878
SENSATION: See Color Blindness
SENSITIVITY: See Anaphylaxis and Allergy; Skin reaction
SENSITIZATION: See Arsphenamine; Castor Bean; Skin
Tests: See Dermatology
SEPTICEMIA: See also Bacillemia; Bacteremia
colon bacillus, bacteriophage therapy, [MacNeal] 2056—b
treatment, transfusions in children, [Roehm] 445—ab
treatment, Vincent's serum, 500; 1720; 2040
SEPTUM, Nasal: See Nose
SERODIAGNOSIS: See Cancer; Leishmaniosis; Syphilis; Undulant Fever
SEROTHERAPY: See Botulism; Burns; Colitis, ulcerative; Gangrene, gas; Poliomyelitis; Scarlet Fever; Septicemia
SERUM: See also Streptococcus
A. M. A. special exhibit on, Atlantic City Session, 1953
Convalescent: See Poliomyelitis
Disease: See Anaphylaxis and Allergy
horse, Normal Horse Serum-P. D. & Co., 917
horse, protects against sparteine poisoning, [Rubegni] 451—ab
human, administration, danger in, 192—E; [Sokol] 622—C
injection and elective site for vaccination, 704
lymph and, 1952—E
Plasma: See under Blood
SEWAGE, problem in Madrid, 1391
SEWERS, dangers, 928
spirochetal jaundice (Weil's disease) in workers in, 493—E
SEWING Machine Bobbin: See Bobbin
SEX: See also Castration; Impotence
Glands: See Gonads
Hormone: See also Androtin; Antultrin-S; Pituitary Body hormone (sex)
hormone, pineal body contains, 1626—E
hormone, site of formation, [Remzi] 1416—ab
offenses in postwar period, Germany, 931
offenses, legislation, Irish Free State, 848
prediction, Dorn-Sugarman test, [Murphy] 870—ab
SHAVING brushes, anthrax from, (England) 1003; (Australia) 1873
SHEFFIELD Farms Co. Vitamin D Milk, 1623
SHELLFISH, typhoid and fuel oil, 1885
SHEPPARD'S Magic Liniment, 429—BI
SHIGA Toxin: See Dysentery
SHIGELLA alkalescens: See Bacteremia
SHIN: See under Legs
SHIPLEY, RALPH T., memorial, 926
SHOCK, Anaphylactic: See Anaphylaxis and Allergy
collapse and electrosurgery, [Schörcher] 146—ab
SHOCKS—Continued
Electrical: See Electric
traumatic fatal, [Herbst] 795—ab
SHOES, companies stop using title "Dr." 1001
Locke (Mahlon), 1153—E
to correct foot imbalance, [Diveley] ★1510
SHORT WAVES: See also Diathermy; Radio
field, heating of deeper parts in, [Schultze-Rhonhof] 1493—ab
hyperpyrexia induced by, [Bierman & Fishberg] ★1354
therapy of brain in dementia praecox, [Horn] 1031—ab
SHOULDER, dislocation, recurrent, 1642
pressed downward in artificial respiration, [Jellinek] 722—ab
SHRINKAGE Method: See Prostate hypertrophy
SIGMOIDOSCOPIC aspirator (simple), [Fradkin] ★21
SILICA as hazard in soap factories, 778
inhaled, effect on normal and tuberculous lungs, [Gardner] ★743
SILICON carbide, response of peritoneal tissue to, [Miller & others] ★910; ★911
SILICOSIS: See Pneumonoconiosis
SILICOTUBERCULOSIS: See Tuberculosis, Pulmonary
SILK industry, dermatitis in, 939
mill workers, diphtheria in, Japan, 769
SILVER: See also Argyria
C
in Blood: See Blood
Miners: See Miners
nitrate (Credé method) impair vision? 777
nitrate not being used in new-born, Illinois, 1383
Tip Brand Pancake Table Syrup, 1453
SIMMOND'S DISEASE: See Pituitary Body cachexia
SIMMONS (R. H.) nostrums, 429—BI
SIMONETTA, LUIGI, death, 694
SIMS, JAMES MARION, statue rededicated, 1715
SIMS Malt-O-Wheat Breakfast Cereal, 413
SINAPOLE Ointment, 205—BI
SINUS: See Carotid Sinus; Cavernous Sinus; Lateral Sinus; Maxillary Sinus
Pilonidal: See Pilonidal Sinus
Thrombosis: See Thrombosis
SINUSES, NASAL, cytology of secretions in allergy, [Hansel] 137—ab
disease associated with middle ear infection, [Cullom] ★1695
drainage, sodium iodide intravenously and, 1171
infections, vaccines in, 773; (autogenous) [Cox] 1988—ab
nostrum of Clara Ross, Inc., 1873—BI
SINUSITIS: See also Maxillary, Sinusitis
chronic, hypoglycemia and ketosis, [Sippe] 377—ab
climate and, 939; 1175, 1797
pansinusitis, bacteriotoxic polyneuritis from, [Cobb & Coggeshall] ★1611
pansinusitis, residence for, 939
SIPHONOSPORA polymorpha (Brehmer), cause of cancer, 1077
SIPPY Treatment: See Peptic Ulcer
SKIN: See also Dermatology; Epithelium; Tissue
action of dichlorethylsulphide (yellow cross or mustard gas) on, 1867
amebic ulcers, [Meleney] ★1217
amyloidosis, [Michelson] 372—ab
as source of antibodies, 1876
Blood Vessels: See Blood Vessels
cancer, early recognition; treatment, [Lingenfelter] 294—ab
cancer, postoperative care, 1328
care of, around fecal fistula with boric acid powder in zinc oxide, 1973
color after U-V irradiation, [Rogin] 73—ab
Disease: See also Dermatitis; Eczema; Urticaria; etc.
disease, allergic, [Coca] ★1275
disease and peptic ulcer, [Bergman] 1031—ab
disease, hereditary, and consent to marry, Germany, 931
disease, light sensitive, [Anderson & Ayres] ★1279
disease, liver dysfunction in, [Döllken] 1742—ab
disease, painting with chloroform, [Klingmüller] 304—ab
disease, pustular, staphylococcus toxoid in, [Sharlit] 125—C
disease with acute vulva ulcer, [Talalov] 1807—ab
disorders, chloride elimination in, [Zorn] 1265—ab
electrical potential in relation to colds, 423
graft, localization in pedicle flap, [Douglas] 1653—ab
Larvae in: See Creeping Eruption; Myiasis
leishmanoid, [Brahmachari] 75—ab
lesion, differential diagnosis, 207
lesions in rheumatic fever, [Chester] 867—ab
lesions (recurrent) in breast cancer; radium jacket for, [Richards] 1570—ab
lesions (unusual) in tertian malaria, [Davis] 286—ab
looseness of, of neck, 1474
lymphatics, [Tobias] 507—C
Myiasis: See Myiasis

SKIN—Continued
neurocutaneous syndrome: congenital ectodermoses, [Kulchar] 1023—ab
reaction to streptococcus for arthritis treatment, [Wainwright] *1357; 1733—ab
reaction to ultraviolet radiation, [Peacock] 74—ab
reaction to vaccines, [de Bruin] 1806—ab
recuperation after irradiation, [Duffy] 1890—ab
rheumatic nodules, [Rosenberg] 1262—ab
Sensitivity: See Tuberculin
sensitization, diagnosis, 2047
sensitizing to sunlight by drugs, [Anderson & Ayres] *1282
tanning of, 126
Test: See also Anaphylaxis and Allergy
test (patch) in arsphenamine sensitization, [Robinson] 1656—ab
SKULL: See Cranium
SKYSHINE, source of radiant energy, [Laurens] *1447
SLEEP, muscle cramps during, calcium gluconate for, [Steven] 1475
narcolepsy, ephedrine in, [Johnson] 295—ab
narcolepsy syndrome, [Reinwein] 1576—ab
narcolepsy, terminology, 773
somnambulism, 1561
SLUM areas, survey, New York City, 926
SMACO carotene and carotene preparations, 340
vitamin D preparations, 340
SMALLPOX: See also under Medicolegal Abstracts at end of letter M
Vaccination: See also Immunization, simultaneous
vaccination, chicken embryo cultures for, [Coffey] 213—ab
vaccination, in new-born, [Donnally & Nicholson] *1269
vaccination, order of, against infection, 1091
vaccination, San Francisco, 417
world prevalence, 1243
SMITH, THEOBALD, 1964
SMITHIES Diet: See Peptic Ulcer, treatment
SMITH-PETERSEN Nail: See Femur fracture
SMOKE: See Air
SMOKING: See Tobacco
SNAKE bite, 1088
bite by, in bunch of bananas, [Fernan-Nunez] *409
bite, gold preparations in, 699
SNOW, contamination of, 563
King Double Action Baking Powder, 1151
SOAP factories, silica hazard, 778
SOAPSTONE, peritoneal tissue response to, [Miller & others] *910; *911
SOCIAL hygiene, American Social Hygiene Association withdraws "Damaged Lives," 1387
Insurance: See Insurance
Medicine: See Medicine, socialized; Physicians, socialistic
service and hospitals, 424
Service Exchange, applicants for medical services cleared through, New York, 1785
significance of schizophrenia, 56
work, medical, 462—ab
workers stationed in courts, New York City, 418
SOCIETIES, MEDICAL: See also under names of specific societies; list of Societies at end of letter S
County: See also Alameda County; Philadelphia; Wayne County
federation of, Brazil, 57
Societa di gastro-enterologia, Italy, 1464
Society for Prevention of Tuberculosis (twentieth conference), 270
Society for Research on Blood Circulation, 35
state, Annual Conference of Secretaries, 843
state, graduate instruction relation to, [Parkins] *546; *547
state, offering graduate courses, A. M. A. resolution on, 1544
SODIPRAL: See Ipral
SODIUM Amytal: See Mental Disease, treatment
Benzoate: See Peptic Ulcer
bicarbonate, effect on urinary excretion of citric acid, [Schuck] 375—ab
bicarbonate incompatible with aspirin, 861
bicarbonate solution, preparing: indications for injections, [Hartmann] *1350; *1352
Bismuth Sodium Tartrate: See Verruca
Bromide: See Epilepsy treatment
Chloride: See also Addison's Disease, treatment; Epilepsy treatment; Salt
chloride hypertonic solution for anuria after diabetic coma, [Root] *482
chloride, loss of, and increase of rest nitrogen, [Kohlschütter] 302—ab
chloride solution intravenously in nephritis, 1014
Citrate: See Hemorrhage control
Ferrocyanide: See Kidney function tests
fluoride, effects, 280
Hypochlorite: See Wounds irrigation
Iodide: See Iodides
Ipral: See Ipral
lactate, preparing; indications for injection, [Hartmann] *1350; *1352
Morrhuate with Benzyl Alcohol (Ulmer) 1708
ricinoleate, chemotherapeutics, [Kolmer] 444—ab
Thiocyanate: See Dysentery toxin
SOLDIERS: See also Army; Military; Veterans; War
physical examination of conscripts, Japan, 202
SOMNAMBULISM: See Sleep
SONNE Dysentery: See Dysentery
SORGHUM: See Syrup
SOUND, phonendoscopy and diagnosis of perivisceritis, 848
SOUP: See Malt
SOUTH AFRICAN: See also Medical Association of South Africa
Medical Congress (28th), 1961
Natives: See Negroes
SOUTH SIDE Dairy Vitamin D Milk, 1623
SOUTHERN DAIRIES Vitamin D Buttermilk, 1539
Vitamin D Milk, 1069; 1623
SOUTHERN MEDICAL ASSOCIATION, 1387
SPAGHETTI: See also Vermicelli
Fontana's Semolina, 1151
SPARKS Dairy Vitamin D Milk, 919
SPARTEINE poisoning, horse serum protects against, [Rubegni] 451—ab
SPASM: See Habit; Muscles
SPECIALISTS: See also Obstetricians; Pathologists; etc.
A. M. A. resolution on recognition of, 1543
evolution, 330—ab
SPECIALTIES in 1934 AMERICAN MEDICAL DIRECTORY, *578
examining boards in, essentials for, 48; *579
hospitals approved for residencies in, *597; 1476
SPECIFIC GRAVITY (low) of urine, 625
SPECTROGRAPH: See Blood silver
SPEECH disorders, stammering, 510
epiglottis function in, 1797
of laryngectomized persons, 768
SPERMATIC CORD, torsion, new sign to differentiate epididymitis, [Prehn] 872—ab
SPERMATOZOA, necrospermia and azoospermia causes of sterility, 1012
SPHENOPALATINE GANGLION: See Meckel's Ganglion
SPHINCTER OF ODDI, [Ivy & Bergh] *1501
cholangiography, thorium dioxide sol, [Saragosti] 1022—ab
SPICE, McCormick's Bee Brand Cake & Pastry, 341
SPINACH, Stokely's For Baby, 29
SPINAL CORD: See also Radiculomeningomyelitis
changes in pernicious anemia, [Goldhamer & others] *1663
chordotomy for pain of cancer or meningoradiculitis, [Polenov] 955—ab
funicular disease, therapy, [Illing] 1493—ab
injury and impotence, 1092
kyphoscoliosis and, [Borchardt] 634—ab
lesion, tumor, in spastic paraplegia, [Winkelman & Eckel] *662
lymphatic system relation to, [Gilchrist] 299—ab
pressure damage to, treatment, [Kulenkampff] 532—ab
subacute degeneration in elderly, [Greenfield] 789—ab
tumor, radius reflex inverted and facial paralysis with, [Johnsson] 1818—ab
tumor suspects, normal spinal fluid dynamics in, [Poppen & Hurxthal] *391
SPINAL PUNCTURE: See also Cerebrospinal Fluid drainage; Meningitis
lumbar, introduction, 1499—ab
SPINE: See also Coccygodynia; Sacro-Iliac
adenocarcinoma metastatic from prostate simulating Pott's disease, [Dickson] 74—ab
ankylopoietic spondylarthritis, roentgenotherapy, [Haenisch] 1494—ab
cervical, pseudo-angina pectoris originating in, [Nachlas] *323
curvature, scoliosis with pain in right calf, 700
curvature, thoracogenic scoliosis, [Bisgard] 1334—ab
disease, roentgen diagnosis, 1790
disorder, secondary vibration in, [Stalmann] 305—ab
elongation of transverse processes of lumbar vertebrae, 1877
fractures, automobile jack for, [Ryerson] *562
fractures (compression) of vertebral bodies, [Parmley] 1406—ab
Koranyi's sign (hypophonesis of dorsal segment), [Weller] 1107—ab
kyphoscoliosis and spinal cord, [Borchardt] 634—ab
pathology of intervertebral disks, 274
Pott's disease, operation for, [Ito] 713—ab
tumor, chordomas, [Hass] 947—ab
tumor, perineurial fibroblastoma, [Harrington & Craig] *1702
SPINNERS, cotton spinners' cancer, 1959
SPIROCHETES: See also Jaundice, spirochetal
extract, specificity, [Marquardt] 1187—ab
SPIROCHETOSIS, fusospirochetal lung abscess, [Smith] *972
Vincent's infection of mucous membranes, 1327
SPLEEN, effect on transplanted growth, [Matsuoka] 221—ab
extracts effect on diabetics, [Rathery] 791—ab
SPLEEN—Continued
phylogeny of blood-forming tissues, 808—ab
tumor, sarcoma, [McNee] 715—ab
SPLENECTOMY, relation to carbohydrate and oxalic acid exchange, 693
SPOROTRICHOSIS, treatment, [Fantus] *833
SPOTTED FEVER in Maryland, 116
in Wyoming, 928
therapeutic tick-bite fever in dementia paralytica, 851
tick bite fever, 852
SPRAINS, pathology; treatment, [Smart] 1891—ab
SPRING Water: See Water
SPRINGBROOK Dairy's Vitamin D Milk, 1069
SPRINGS, Medicinal: See Mineral Waters
SPRUE, treatment, liver extract, [Rhoads & Miller] *387
SPUTUM, sero-albuminous, after pleural puncture, [Mumme] 635—ab
SQUIBB Adex Tablets 10-D, 754
SQUILL: See Scillonin
SQUINT: See Strabismus
SQUIRRELS, ground, plague in, California, 115; 265; 417
STAFF: See Hospitals
STAIN: See Semen
STAINING: See Blood; Iodine; Reticulocytes
STAMMERING: See Speech disorders
STAPHYLOCOCCUS Aureus Endocarditis: See Endocarditis
antitoxic serum in acute staphylococcic infections and toxemias, [Dolman] 373—ab
exotoxin, ingestion, [Dolman] 1487—ab
infections, bacteriophage therapy, [Eaton & Bayne-Jones] *1773
toxoid in pustular dermatoses, [Sharlit] 125—C
vaccines, skin reactions to, [de Bruin] 1806—ab
STATE BOARD REPORTS
Alabama, 862
Arizona, 130; 1093
California, 64; 130; 515
Colorado, 436; 1799
Connecticut, 1476
Delaware, 627
District of Columbia, 862; 1648
Florida, 778
Georgia, 1092
Hawaii, 209; 705
Idaho, 363
Illinois, 515; 1729
Indiana, 1799
Iowa, 283; 1400; 1476
Kentucky, 515; 862
Louisiana, 1328
Maine, 1257
Maryland, 627; 1256
Massachusetts, 1647
Minnesota, 515; 940
Mississippi, 1257
Missouri, 1400
Nebraska, 1175
Nevada, 363; 1729
New Hampshire, 627; 1973
New Mexico, 515
New York, 1015
North Dakota, 1729
Ohio, 209; 1974
Oklahoma, 64; 941; 1175; 1974
Oregon, 283
Puerto Rico, 363
Rhode Island, 436; 2050
South Carolina, 2051
South Dakota, 1648
Tennessee, 2051
Texas, 1400
Utah, 862
Vermont, 779
Virgina, 2051
Washington, 209
West Virginia, 1878
Wisconsin, 130; 1563; (correction) 1717
Wyoming, 704
STATE Medicine: See Medicine
STATISTICS: See Vital Statistics; under Medicolegal Abstracts at end of letter M
STEATORRHEA: See Feces, fat in
STEIN, GERTRUDE, and pallialia, 1711—E
STELLATE Ganglion: See Ganglion
STEPHENS Brand Syrup: See Temple Stephens
STERILITY (bacterial) of ampule preparations, Council report, 678; 683—E
STERILITY (sexual): See also under Medicolegal Abstracts at end of letter M
after 2 abortions, 1089
diagnosis and treatment, new center for Milan, 1867
diagnosis, transillumination of testicle in, 2049
etiology, necrospermia and azoospermia, 1012
phase in normal women, Hegar dilators for, [Birnberg] *1143
Treatment: See also Impregnation, artificial treatment, 1254
STERILIZATION, SEXUAL, by coagulation of uterine cornu, [Hyams] 783—ab
by transplanting uterine end of tubes, [Siemons] 68—ab
eugenic, of abnormals, Szwarcz's thesis on, 1463

STERILIZATION, SEXUAL—Continued
law to be enforced, West Virginia, 419
of females, [Burch] 371—ab
of mental defectives, England, 198; 270; 422; 1959
problem, Germany, (blindness) 766; (courts) 849; (deafness) 850; (gynecology and obstetrics) 1005; (psychiatry) 1164; (for foreigners) 1391; (progress) 1464; (operations) [Fromme] 1815—ab
STERILIZATION SURGICAL of needles for artificial pneumothorax, 2050
STERILOMETER, Indicator, Chemical Laboratory report, 1621
STERNBERG, MAX, death, 1466
STEROLS in milk, 190—E
STEWART Treatment: See Osteomyelitis
STIFFENING: See Fingers; Hand
STILLBIRTH: See also Fetus
prevention, [Clifford] *1117
STINGS: See Bee; Wasp
STIRIZOL, 429—BI
STODDARD'S solvent, hazards in hat cleaning, 1013
STOKELY'S For Baby Specially Prepared Strained (spinach) 29; (tomatoes) 110; (carrots) 189
STOKER'S Cramps: See Cramps, heat
STOKES-Adams Attacks: See Heart block
Cheyne Respiration: See Respiration
STOMACH: See also Gastro-Intestinal Tract
Achylia: See Achylia
acidity, achlorhydria, [Hurst] 1891—ab
acidity, anacidity, apparatus for detecting free acid, [Necheles & Schc...] *107
acidity, effects of desiccated hog's stomach in achlorhydria, [Schiff] 2055—ab
acidity in iron-deficiency anemias, [Bethell & others] *797
acidity vs. proteins and carbohydrates, [Rehfuss] *1600
anastomosis of intrahepatic bile duct with, [Gohrbandt] 1575—ab
cancer, [Gray] 1885—ab
cancer, atypical forms, [Goyena] 1742—ab
cancer, atypical muciparous, [Krukenberg] 536—ab
cancer, extensive, treatment, [Walters] *1345
cancer in Rikshospital, [Bull] 1416—ab
cancer, thrombopenic purpura hemorrhagica with, [Lawrence] 291—ab
contents, diverting to lower intestinal levels, [McMaster] 70—ab
Crisis: See Tabes Dorsalis
Digestion by: See Digestion
dilated, preoperative preparation, [Orr] 528—ab
disease, epigastric pain in, [Pierl] 877—ab
disease nostrum of Clara Ross, Inc., 1873—BI
Extract: See Amebiasis; Anemia, Pernicious, treatment; Pellagra
foreign bodies, roentgen localization with feeding tube, [Tucker] *1440
function, chromoscopy, [Ziballs] 1185—ab
hemorrhage (occult), [Hulst] 453—ab
inflammation, membranous and aphthous, [Korbsch] 954—ab
intestinal mucosa in, cause of ulcer, [Clar] 1339—ab; 1380—E
lavage, 126
lavage in pyloric obstruction, [Freeman] 448—ab
lesion produced by pituitary extract, [Dodds] 2057—ab
motility under low oxygen pressures, [Van Liere] 1179—ab
mucosa, motor mechanism, 271
myxoleukocytic and chlorhydropeptic reactions, [Loeper] 952—ab
peristalsis and antiperistalsis, examination for, [Burger] 1895—ab
resection, anemia after, [Dedichen] 150—ab; 1464
resection, blood changes after, [Dedichen] 796—ab
resection, urine reaction after, [Lion] 78—ab
secretion, alizarin test for, [Purjesz] 453—ab
secretion, histamine stimulation of juice, [Martin] 712—ab
secretion in dog, effect of ulcer diet, [Alley] 2055—ab
Surgery: See Peptic Ulcer, surgical treatment; Stomach resection
Therapy: See Amebiasis; Anemia, Pernicious; Pellagra
Ulcer: See Peptic Ulcer; Medicolegal Abstracts at end of letter M
STOMACH TUBE, glycemia due to introduction of, [Cozzutti] 953—ab
STOMATITIS, aphthae resistentia, 1255
aphthous, burning of tongue and canker sores, 1971
STOMATOLOGY, immunotransfusion in, 694
National Congress of, Italy, 1963
STORAGE: See Food
STORY (J. H.) & Son Dairy Vitamin D Milk, 1705
STRABISMOMETER, [Bressler] *1298
STRABISMUS, treatment, amino-acid, [Tripoli & others] *1595
treatment, instruments used in orthoptic training compared, [Guibor] *916
STRAIN (Overexertion): See under Medicolegal Abstracts at end of letter M
STREPTOCOCCUS: See also Erysipelas; Streptolysins
anaerobic, and empyema, [Fisher] 1652—ab
antiserum, Vincent, 500; 1720; 2040
cellulitis (perirectal), [Hayes] 1179—ab
dissemination of, from acute rheumatic fever, [Howell] 871—ab
hemolytic, differentiation by precipitin tests, [Edwards] 217—ab
hemolytic (minute beta), [Long] 1985—ab
immunity in dogs, 1877
in blood in pemphigus, [Welsh] 1982—ab
infections, bacteriophage therapy, [Eaton & Bayne-Jones] *1773
infections, specific treatment, [Baum] 1887—ab
invasiveness, mechanism, [Dennis] 1985—ab
rôle in genito-urinary disease, [Culver] *637
serums (specific), [Loewenthal] 1891—ab
that resemble diphtheroids in subacute endocarditis, [Ferguson] 1487—ab
vaccine (influenzal) in respiratory infections, [Rosenow] 217—ab
vaccine, skin reaction to, basis for treatment of chronic atrophic arthritis, [Wainwright] *1357; 1733—ab
STREPTOLYSINS, serologic study, [Todd] 1739—ab
STRETCH-A-WAY Reducer and Health Exerciser, 1621
STROEHMANN'S Bread, 1379
STRONGYLOIDES stercoralis, [Brown] *859
STROPHANTHIN: See Angina Pectoris, treatment
STRUMA: See Goiter
STRYCHNINE injections to combat barbital toxicity, 270
case against A. B. & S. Pill, [Yonkman & Singh] *1931
STUDENTS: See also Children, school; Students, Medical
college, financial aid for, by FERA, 420
high school, heart disease in, New York, 497
STUDENTS, MEDICAL, American, conflict with Vienna Faculty of Medicine, 1248
American, in medical faculties abroad, *575; *576; *577
by classes—1929-1934, *574
by states, *571
home states, *568; *569; *571
in U. S., 1905-1934, *573; *574
number, bill to limit, France, 1788
number, restrict, France, also Germany, 1078
Polish registration law, 425
serving internships, *571; *572
surplus, Germany, 691
women and men, *573
STURTEVANT Ice Cream Co. Vitamin D Milk, 2029
SUBURAL Hemorrhage: See Meninges
SUBOCCIPITAL Puncture: See Cisterna Magna
SUGAR, Grape: See Dextrose
metabolism and cerebral injury, 1327
Threshold: See Dextrose tolerance
tolerance in siblings of juvenile diabetics, [Mackler & Fischer] *240
value in sustaining physical effort: why Cambridge wins the boat race, 690
SUGARMAN-Dorn Test: See Sex prediction
SUICIDE, increase, Tokyo, 1166
of the adolescent, 2039
poisons used for suicidal intent, 1868
SULCUS, superior pulmonary, tumor, [Jacox] *84
SULPHARSPHENAMINE-Abbott, 1947
SULPHORADION, 697—BI
SULPHUR dioxide, continuous exposure to, in refrigerator service man, 362
metabolism, light sensitive dermatoses, [Anderson & Ayres] *1279
mine workers, diseases of, 1963
Treatment: See Dementia Praecox
SUL-SO-TAR, 429—BI
SUN-BLEST Pineapple Juice, 919
SUNLAMPS: See also Ultraviolet Rays
Hanovia Home Model Alpine Sun Lamp, 1229
Luxor S-B Alpine Sun Lamp, 1150
SUNLIGHT, pulmonary tuberculosis after sun baths, [Gosse] 715—ab
sensitive dermatoses, [Anderson & Ayres] *1279
sensitivity to, 279
source of radiant energy, [Laurens] *1447
telangiectasia after actinic exposure, 1011
vitamin D and, 1434—ab
SUNSET Dairy Co. Vitamin D Milk, 1623
SUNSHINE DAIRIES Vitamin D Milk, 1623
SUNSWEET Juice of Dried Prune, 993
SUPERIOR Dairy Co. Vitamin D Milk, 2029
SUPPLEE Bacillus Acidophilus Milk, 1708
SUPPOSITORIES, Rectal: See Dilaudid
SUPPURATION: See also Lungs; Nephritis; Petrous Bone; Pleura; etc.
bacteriophage therapy, [Eaton & Bayne-Jones] *1847
SUPRAPUBIC Drainage: See Bladder
Prostatectomy: See Prostatectomy
SUPRARENALECTOMY: See also under Suprarenals, hypersuprarenalism
in obliterative arteritis, [Leibovici] 1812—ab
SUPRARENALS, cortex extract (glycerin) sensitivity in schizophrenia, [Freeman] 1568—ab
cortex extract in pyogenic infections, [Wenner] 947—ab
cortex hormone (eschatin), [Rogoff] *1764
hypersuprarenalism, subtotal bilateral suprarenalectomy for, [DeCourcy] 1181—ab
surgery, 1550
tumor, adenoma of left, [Bergstrand] 709—ab
weight changes in, [Blumenfeld] 217—ab
SUPREME Court Brand Chocolate, 260
SURF Rider Brand Pineapple, 1069
SURGEONS, American Association of Railway Surgeons, 688
American College of, 1076
meeting, Mexico, 1636
SURGERY: See also Electrosurgery
black vomit, prognostic value, [Melchlor] 1109—ab
blood sugar level in operations, [Weddell] 875—ab
complications of ascariasis, [Virgilio] 1741—ab
diseases, alkali reserve of blood plasma in, [Szold] 1496—ab
diseases, cholesterolemia in infants, [Bernabeo] 1029—ab
evaluating power of resistance of organism in, [Schürer-Waldheim] 1575—ab
French Surgical Congress, 1549
in Children: See Abdomen
Italian Surgical Society, 694
Lombard Surgical Society, 1867
Orthopedic: See Orthopedics
Plastic: See Face deformities; Harelip; Hip Joint dislocation
Postoperative Care: See Skin cancer
Postoperative Complications: See Tonsillectomy
postoperative enema, [Countryman] 1738—ab
postoperative intravenous sodium chloride injections, [Berri] 1814—ab
postoperative vomiting, [Smith] 1184—ab
Society of Pavia, 503
SURGICAL TRADE code forbids rebates, 1071—E; [Hovey] 1088—C
SUTURE: See Aorta; Cranium
SWALLOWING Air: See Aerophagia
difficult, in acute epidemic poliomyelitis, [Brahdy & Lenarsky] *229
function of epiglottis in deglutition, 940; (reply) [Batson] 1399
oculopharyngeal reflex, [Di Sorrentino] 877—ab
SWEAT an etiologic factor in vitiligo, [Roop] 788—ab
salt loss in, 282
SWEAT GLAND tumor, syringocystadenoma nodularis, [Sutton] 1023—ab
SWEETHEART Pancake Table Syrup, 1453
SWIMMING: See Drowning; Swimming Pools
SWIMMING POOLS, contaminated municipal, Philadelphia, 763
copper sulphate in to retard marine growth, harmful? 1014
poliomyelitis infection possible, 431
SYDENSTRICKER, EDGAR L., on social insurance, 609—E
SYMPATHECTOMY, effect of epinephrine on extremity after, [Smithwick] 2056—ab
periarterial, in suppurative nephritis, [Moriconi] 1185—ab
pericarotid, 849
SYMPATHICODIAPHTHERESIS, [Doppler] 304—ab
SYMPTOMS: See Diagnosis
SYNEPHRIN: See Neosynephrin
SYNOVIAL Bursa: See Bursa
fluid in gonococcic arthritis, [Myers] 1263—ab
Membrane: See Knee
SYNOVITIS, symmetrical serous (Clutton's joints), [Klauder & Robertson] *236
SYNTHALINE: See Diabetes Mellitus treatment
SYPHILIS: See also Bubo; Chancroid; Neurosyphilis; Venereal Disease; under names of specific organs and diseases
bilirubinemia in, [De Gregorio] 1894—ab
congenital, and interstitial keratitis, [Klauder & Robertson] *236
congenital, exclude child from attending school? 1646
congenital late, 1471
congenital, treatment, 1876
control, treatment, adequacy, [Wile] *648
death in, incidence of, 1961
Diagnosis: See also Syphilis serodiagnosis
diagnosis, anterior pillars of throat changes, [Biederman] 867—ab
diagnosis, Kolmer luetin test, [Barker] 1983—ab
epilepsy with, 1643
etiology, invisible form of agent, [Van Haelst] 792—ab

SYPHILIS—Continued
experimental, blood cytology in, [Rosahn] 374—ab
in a child, 1972
in pregnancy, 208; 511; (treatment) 698; (determination) [Kolbe] 878—ab
latent (possible) 1642
nasal deformities, reconstructive surgery, [New & Figi] *1435
of Nervous System: See Neurosyphilis
optic atrophy in, 1973
Radio Advisory Council prohibits mentioning; Parran resigns, 1715
reinfection in, [Klauder] 1886—ab
Serodiagnosis: See also Kahn Test; Wassermann Test
serodiagnosis, Cantani reaction, [Versari] 1029—ab
serodiagnosis, evaluation of tests, 688; 1237—E; [Cumming & others] *1705
serodiagnosis, hemagglutination reaction of Bachmann, [Bachmann] 1107—ab; [Petzelt] 1577—ab
serodiagnosis, precipitation tests, [Ritchie] 372—ab
serodiagnosis, spirochetal extract, [Marquardt] 1187—ab
skin allergic reactions in, 768
stricture of coronary ostia, [van Muijden] 454—ab
transmitted by transfusion, 61
treatment, 938; 1328; 1875
treatment, arsphenamine (free) for indigents, Indiana, 613
treatment, bismuth, pigmentation after, 432
treatment, colloidal mercury sulphide in, [Walkerlin] 785—ab
treatment, heavy metals, [Pyles] 431—C; (reply) [Stokes] 431—C
treatment, lodides, 510
treatment of latent, 1253
treatment of primary and secondary, [Ramel] 1994—ab
treatment, organic luetin, [Barker] 1983—ab
treatment, renal intolerance of lipoid nephrosis after, 1390
treatment with 4 plus Wassermann, 280
tuberculosis with, treatment, 1396
vaccine, value not established, 282
virus, variations, 1719
yaws and, [Butler] 359—C
SYPHILOLOGY, American Board of, examination, 269; (canceled), 1317
American Board of, diplomates, [Lane] *541
SYRINGOCYSTADENOMA nodularis, [Sutton] 1023—ab
SYRUP, American Brand, 342
Bowey's Carl-Rich, 1709
Cedar Hill Brand, Uncle Sam Brand; President Brand, 1229
Elco Brand, 260
Farmer Jones Brand Sorghum, 918
Faust Brand, 564
Happy Home Brand, 260
Hershey Syrup Genuine Chocolate Flavor, 918
High Up Brand, 413; 1069
Index Brand, 564
Kraft's Brand, 341
Meyers Corn, 1379
Mity Good Brand, 1379
Money Back Brand, 564
N. J. C. Pure Food Brand, including pancake syrup, 1379
Plato Crystal, 564
Portiage, 1379
Red Plume Brand, 564
Red W Brand, 260
Samos Brand, 1379
Silver Tip Brand Pancake, Sweetheart Pancake, 1453
Temple Stephens Brand, 993
Usemore Brand, 1379
Yacht Club Brand Corn, 1379
SYSTOLE: See Heart beat

SOCIETIES

Acad.—Academy
Am.—American
A.—Association
Coll.—College
Conf.—Conference
Cong.—Congress
Conv.—Convention
Dist.—District
Hosp.—Hospital
Internat.—International
M.—Medical
Med.—Medicine
Nat.—National
Phar.—Pharmaceutical
Phys.—Physicians
Rev.—Revision
Ry.—Railway
S.—Surgical
Soc.—Society
Surg.—Surgery
Surgs.—Surgeons

Acad. of Physical Med., 1863
Aero M. A., 1317
All-Union Cong. of Physiologists, Biochemists & Pharmacologists, 1552
Am. Acad. of Ophthalmology and Otolaryngology, 118, 764, 928
Am. Acad. of Pediatrics, 197, 925, 1076, 1459
Am. A. for the Advancement of Science, 52, 1958
Am. A. for Cancer Research, 1317
Am. A. of the History of Med., 53
Am. A. of Obstetricians, Gynecologists & Abdominal Surgs., 688, 1161
Am. A. of Railway Surgs., 688
Am. A. of School Phys., 118, 1386
Am. A. for the Study & Control of Rheumatic Diseases, 1732, 1801, 1883
Am. A. for the Study of Goiter, 53, 1863
Am. A. for the Study of Neoplastic Diseases, 498, 1243
Am. Bronchoscopic Soc., 197
Am. Chemical Soc., 763
Am. Coll. of Phys., 420
Am. Coll. of Surgs., 1076, 1461
Am. Cong. of Physical Therapy, 118, 498, 1001
Am. Dermatological A., 53
Am. Federation of Organizations for the Hard of Hearing, 1786
Am. Hosp. A., 616, 1386
Am. Institute of Nutrition, 1717
Am. Laryngological A., 53
Am. Neurological A., 53
Am. Nurses' A., 1243, 1547
Am. Orthopedic A., 53
Am. Physiological Soc., 1717, 1786
Am. Proctologic Soc., 197
Am. Psychiatric A., 53
Am. Public Health A., 420, 1001, 1240, 1317
Am. Radium Soc., 1077
Am. Roentgen Ray Soc., 846, 1630
Am. Sanatorium A., 1629, 1717
Am. Social Hygiene A., 1387
Am. Soc. of Biological Chemists, 1717, 1786
Am. Soc. of Clinical Pathologists, 196
Am. Soc.for Experimental Pathology, 1717, 1786
Am. Soc. for Pharmacology & Experimental Therapeutics, 1717, 1786
Am. Soc.of Tropical Med., 1461, 1863
Am. S. A., 197
Am. Therapeutic Soc., 1717
Associated Anesthetists of the United States & Canada, 1001, 1630
A. of Am. M. Colleges, 1161, 1547
A. of French-speaking Phys. of North America, 498
A. of Life Insurance M. Directors, 1545
A. of Military Surgs. of the United States, 1461
Brazilian Cong. of Neurology, Psychiatry & Legal Med., 1553
British A. for the Advancement of Science, 1162
British M. A., 53, 197, 421, 498, 617, 930, 1162
British Pharmaceutical Conf., 847
California M. A., 193, 496, 1859
Canadian M. A., 53
Central A. of Obstetricians & Gynecologists, 1717
Central Soc. for Clinical Research, 1076, 1717
Central States Dermatological Soc., 1076
Chicago Gynecological Soc., 194
Chicago M. Soc., 50, 194, 613, 1383
Chicago Soc.of Internal Med., 50
Chicago Urological Soc., 50
Cleveland Acad. of Med., 1862
Clinical Orthopedic Soc., 1863
Colorado State M. Soc., 761, 1158
Conf. of Allied M. Professions, 1385
Conf. of Dairy, Food & Drug Officials of the United States, 616
Conf. of State & Provincial Health Authorities of North America, 118
Cong. of the Belgian M. Federation, 2047
Cong. on Colon Bacillus Infection, Paris, 2039
Cong. of Dermatologists, Prague, 123
Cong. of French-Speaking Pediatricians, 1163
Cong. of French-Speaking Phys. of North America, 355, 1317
Cong. of French-Speaking Physiologists, 765
Cong. of German Ophthalmologists, Berlin, 2040
Cong. of Internal Med., Berlin, 121
Cong. of Internists, Budapest, 620
Cong. of Microbiology, 1718
Cong. of Ophthalmology, Paris, 271
Cong. of Slavic Dermatologists, Prague, 123
Cong. of Surgery, Buenos Aires, 1791
Connecticut State M. Soc., 613
Dallas County M. Soc., 1862
Delaware, M. Soc. of, 1383
District of Columbia, M. Soc. of the, 349, 1783
Eastern Soc. of Anesthetists, 1001
Federation of Am. Societies for Experimental Biology, 1717, 1786
Florida East Coast M. A., 1544
Florida Radiological A., 266
French Cong. of Gynecology, 55
French Cong. of Med., 498
French S. Cong., 1549
French Urologic Cong., 1632
Georgia, M. A., of, 49, 1859
German Roentgen Soc., 271
Idaho State M. A., 613, 1158
Indiana State M. A., 1384, 1714
Internat. Anesthesia Research Soc., 1001
Internat. Antirheumatic Cong., 768
Internat. A. of Police & Fire Surgs., 1001
Internat. A. of Preventive Pediatrics, 420
Internat. Conf. on Chronic Rheumatism, 1079
Internat. Conf. on Vitamin Standardization, 353
Internat. Cong. of Electro-Radio-Biology, 53, 498
Internat. Cong. on Gastro-Enterology, 1957
Internat. Cong. of Gynecology & Obstetrics, 1002
Internat. Cong. on Hospitals, Belgium, 424
Internat. Cong. on Industrial Accidents & Diseases, 1077
Internat. Cong. on Life Assurance Med., 1718
Internat. Cong. of Neurologists, 930
Internat. Cong. of Radiology, 1243
Internat. Cong. on Rheumatism, 1081
Internat. Cong. of Socialistic Phys., 123
Internat. Cong. of Tropical Med., 616
Internat. M. Women's A., 1159
Internat. Neurologic Cong., 1002
Internat. Office of Documentation for Military Med., 197, 1005
Internat. Physiological Cong., 1786
Internat. Red Cross Cong., 202
Internat. Soc. of Geographic Pathology, 197
Internat. Veterinary Cong., 196
Inter-State Postgraduate M. A. of North America, 1161, 1630
Iowa State M. Soc., 999, 1315, 1784
Iowa Tuberculosis A., 194, 761
Italian S. A., 694
Kansas City Southwest Clinical Soc., 845, 1075
Kansas M. Soc., 266, 925
Kentucky State M. A., 844, 1628
Los Angeles County M. A., 1628
Maine M. A., 686
Massachusetts M. Soc., 50
Massachusetts Soc. for Mental Hygiene, 1459
M. & S. A. of the Southwest, 1461, 1863
M. Women's Internat. A., 1957
M. Women's Nat. A., 197
Michigan State M. Soc., 614, 844, 999
Mid-Western A. of Anesthetists, 1001
Minnesota Acad. of Ophthalmology & Otolaryngology, 496
Minnesota State M. A., 50, 418, 1316
Mississippi Valley Conf. on Tuberculosis, 928, 1461
Mississippi Valley Sanatorium A., 928, 1461
Missouri Acad. of Science, 1545
Missouri Public Health A., 844
Missouri State M. A., 286
Missouri Tuberculosis A., 844
Montana, M. A. of, 614
Nat. Acad. of Arts & Sciences, 1957
Nat. Acad. of Sciences, 1957
Nat. A. of Science Writers, 1076
Nat. Committee for Mental Hygiene, 1717
Nat. Conf. of Social Workers, 1958
Nat. Cong. of Med. of Argentina, 1791
Nat. M.A., 420, 1001
Nat. M. Committee on Federal & State Contraceptive Legislation, 1547
Nat. Recreation Cong., 498
Nat. Soc. for the Prevention of Blindness, 1243
Nat. Tuberculosis A., 52, 269, 420, 846, 1317, 1717
Nevada State M. A., 1159
New England Pediatric Soc., 1459
New England S. Soc., 419, 1076, 1317
New Jersey, M. Soc. of the State of, 51
New Mexico M. Soc., 117, 418
New Mexico Public Health A., 418, 926
New York Acad. of Med., 497, 1385, 1861, 1955
North Dakota Acad. of Ophthalmology & Otolaryngology, 763
Ohio State M. A., 419, 845, 1000, 1242
Oregon State M. Soc., 926, 1160
Pacific Coast Oto-Ophthalmological Soc., 688
Pacific Coast Soc. of Obstetrics & Gynecology, 1547, 1958
Pacific Northwest M. A., 688
Pan-American Cong. on Tuberculosis, 1318
Pan-American Sanitary Conf., 1717, 1786, 1791
Pennsylvania, M. Soc. of the State of, 927, 1076, 1316
Pennsylvania Tuberculosis Soc., 846
Philadelphia Committee on the Conservation of Vision, 1386
Philadelphia County M. Soc., 927, 1386
Radiological Soc. of North America, 928, 1958
St. Louis M. Soc., 1785
Societa di gastro-enterologia, Italy, 1464
Société Belge de Gynecologie et d'Obstetrique, 1002
Soc. of Am. Bacteriologists, 1717
Soc. for Plastic & Reparative Surg., 1076, 1386
Soc. for the Prevention of Tuberculosis, London, 270
Southern M. A., 269, 1387, 1786
Southern Tuberculosis Conf., 1317
Texas A. of Obstetricians & Gynecologists, 1460
Texas Pediatric Soc., 268
Tri-State M. Soc. of Ark., La. & Texas, 1074, 1547
United States Live Stock Sanitary A., 1786
Utah State M. A., 118
Vermont State M. Soc., 1001
Virginia, M. Soc. of, 846, 1386
Washington State M. A., 687, 1243
Western Ophthalmological Soc., 688
Western Orthopedic A., 1863
Wisconsin, State M. Soc. of, 615, 927, 1001
Wyoming State M. Soc., 118, 420

T

TABES DORSALIS, anticerebral reagin in spinal fluid, [Demanche] 1265—ab
gastric crisis, forced spinal drainage in, [Fellows] 1886—ab
manifestations after diphtheria, [Werner] 1996—ab
pathogenesis and lymphogranulomatosis, 766
treatment, 282
treatment, exacerbations of pains after, 1971
TAKATA Reaction: See Liver disease
TAL-O-RUB, 204—BI

TAMPONADE, uterovaginal, [Relles] 531—ab; [Kiss] 1266—ab
TAN-A-WA Nervine; Tonic, 697—BI
TANGERINES, Dr. P. Phillips, 839
TANLAC Rheumatism Treatment, 429—BI
TANNIC ACID: See Acid; Burns, treatment
TANNING of skin, 126
TAPEWORM INFESTATION, treatment, carbon tetrachloride and aspidium (male fern), [Brown] *657
TARGET Unsweetened Evaporated Milk, 1539
TATTOOING, removal, 777
TAX, hospitals protest, New York City, 1785
on carbon arc lamps used in hospitals, 198
on cod liver oil, England, 269
on insulin, repealed, England, 55
on physicians, suppression, France, 1389
on surgical instruments, England, 1003
TAY-SACHS Disease: See Idiocy, amaurotic family
TEAKETTLE: See Aluminum kettle
TEASPOON, metric equivalent, 1457—E
TECHNICIANS, blind, clinic staffed by, 688
TEETH: See also Dental; Gums; Tooth brushes
alterations, relation to endocrinology, 1963
arsphenamine hurt? 282
care in pregnancy, 1972
caries of mother and prospective child, 1473
caries, relation to pregnancy, 694
development, constitution, diet and internal secretions effect on, 129
diet and disease, 1162
erosions, 1797
eruption, 1175
extraction under local anesthesia, hematoma after, 857
innervation of pulp, 1092; 1728
mottled enamel, 1791
Syrup of Cupriferrum (Squibb) injure? 282
TELANGIECTASIS after actinic exposure, 1011
hereditary, 1005
TELEPHONE noises cause of tympanic rupture, 282; 1015
TEMPERATURE: See also Climate; Cold; Heat
dinitrophenol and, [Cope & Coombs] 60—C
effect on vaccinia virus, [Amies] 376—ab
high, processing roentgenograms at, [Farthing] 1890—ab
perception, modifying threshold of, [Isler] 224—ab
TEMPERATURE, BODY: See also Fever
disturbances, [Lakin] 1574—ab
high, after intravenous therapy, [Banks] 135—ab
low, protracted subfebrile, [Gelman] 1576—ab
normal and abnormal, 1646
TEMPLE Stephens Brand Syrup, 993
TEMPORAL Bone: See Petrous Bone Reflex: See Reflex
TENDON transplantation in obstetric paralysis, [L'Episcopo] 710—ab
TENNIS Elbow: See Elbow
TERATOMA, containing rudimentary arm bones and hand, [Brines] 1838
TERMINOLOGY, auto-anaphylaxis, iso-anaphylaxis, 192—E; (reply) [Sokol] 622—C
blindness defined, A. M. A., Committee report, [Jackson & others] 1445
language of medicine, 842—E; [Skou] 1794—C
of glandular products, 1152—E
physical medicine, physico-therapy, [Hirsh] 507—C
venoclysis, [Hendon] 1641—C
TESTICLES: See also Orchiepididymitis
hormone in urine in castrated adult, [McCullagh & Renshaw] *1140
injured by estrin, [De Jongh] 536—ab
maldescended, operation for, [Wolfson] 1406—ab
single, and potency, 626
transillumination in diagnosis of sterility, 2049
tumors, effect of injury in, [Willis] 1337—ab
undescended, Antuitrin S in, [Cohn] *103; 1877
undescended, gravidic urine extract (Follutein) for, [Aberle & Jenkins] *314
undescended, operation for, [Matti] 718—ab
TETANUS: See also under Medicolegal Abstracts at end of letter M
antitoxin, Arthus phenomenon, [Ross] *563
otogenic, [Vener & Bower] *480
toxoid (alum precipitated), immunization with, [Bergey] 523—ab, 871—ab
treatment, curare, [Cole] 1411—ab
without demonstrable atrium of infection, 1463
TETANY, after feeding fruit juices, [Bäumler] 1493—ab
etiology, hyperguanidinemia, [Dodd] 67—ab
rôle in parathyroid cataract, [Evans] 1333—ab
TETRACHLOROETHYLENE: See Hookworm infestation
TEUSLER, RUDOLPH BOLLING, death, 1166
TEXAS Club of Internal Medicine, 1636
THALAMENCEPHALON: See Diencephalon
THALL'S nostrums, 204—BI; 205—BI
THALLIUM Acetate: See also Ringworm of scalp
acetate poisoning, ocular lesions from, [Swab] 1485—ab
neuritis, [Ellis] 2045—C
poisoning, [Klemperer] 722—ab
THAMES Valley Tomato Juice, 1709
THEELIN treatment of involutional melancholia, [Werner & others] *13
THEOBROMINE as diuretic, 1091
effect, peripheral vasodilating, [Newell] 1104—ab
THERAPEUTICS: See also Electrotherapy; Physical Therapy
pharmacologist and therapeutist, [Musser] *725
therapy of Cook County Hospital [Fantus] (conjunctivitis) *25; (reply) [Fridenberg] 430—C; (accidental wounds) *108; (erysipelas) *183; (measuring prescriptions) 282; (furunculosis) *311; (fever regimen) *394; (barbiturate poisoning) *749; (mycoses) *832; (anthrax) *915; (heat cramps, etc.) *990; (carbuncle) *1066; (eczema: dermatitis) *1305; (discussion of previous articles) *1375; (burns) *1446; (glaucoma) *1537; (chancroid; bubo) *1853; (pain) *1939
THIGH: See Groin
THINKING: See Mental Stimulus
THIO-BISMOL, Ampoules, 109
THIOGLYCANATE, Sodium: See Dysentery toxin
THIOSINAMINE: See Esophagus stenosis
THORACOPLASTY: See also Tuberculosis, Pulmonary
periosteum regeneration after costal resection, [Di Paola] 877—ab
THORAX: See also Oleothorax; Pneumothorax
disease, thoracogenic scoliosis, [Bisgard] 1334—ab
examination, Illinois State Fair, 50
intrathoracic changes in tularemia, [Blumberg] 527—ab
surgery, scope, [Adeney] 790—ab
THORIUM Dioxide Sol: See Aneurysm, carotid; Nerves, peripheral; Pancreatic Duct; etc.
Hydroxide Sol: See Endometrium, roentgen study
THROAT: See also Neck; Tonsils; etc.
anterior pillars change in appearance sign in syphilis, [Biederman] 867—ab
gargling accomplish its purpose? [Von Liebermann] 1030—ab
irrigation and gargling, [Snow & Stern] *831
septic sore, from contaminated milk, New York, 845
septic sore, milk-borne epidemic, New Jersey, 350
Streptococcus hemolyticus in, of children in hospital wards, [Burgin] 1024—ab
THROMBO-ANGIITIS OBLITERANS, 1174
effects of cigaret smoking on, [Wright & Moffat] *318
etiology, [Gray] 872—ab
treatment, pavaex apparatus, [de Takáts] *1921
THROMBOPENIC Purpura: See Purpura haemorrhagica
THROMBOPHLEBITIS: See also Phlebitis
of cavernous sinus, 504
THROMBOSIS, complications, pericarditis; electrocardiogram in, [Barnes] 1097—ab
coronary, after sudden exertion, 1876
coronary, dissecting aortic aneurysm wrongly diagnosed, [White & others] *1135
coronary, harmful to give glyceryl trinitrate or amyl nitrite, 1013
coronary, oxygen treatment, [Barach & Levy] *1690
coronary, prognosis, 1014
embolism and, 355; 1091; 1789
foam, [Löffler] 1896—ab
lateral sinus, [Wible] 1488—ab
mesenteric, [Green & Allen] *11; [Ralph] 508—C; (reply) [Green] 508—C; [Dunphy] 1737—ab
mesenteric, spontaneous recovery in, 415—E
origin; prevention, [Havlicek] 1339—ab
pathology; treatment with liver extract, [Neuda] 1743—ab
peripheral arterial, [Mead] 786—ab
postoperative, blood platelet count in, [Gradwohl] 288—ab
predisposition to, in polycythemia vera, [Jürgens] 1577—ab
treatment, pavaex apparatus in, [de Takáts] *1921
vascular repair, [Dixon] *1129
THUMB: See Fingers
THYMIC Death: See Lymphatism
THYMUS, dysthymia, 768
enlarged, 209
extract (Hanson) effects on growth, [Rowntree & others] *1425
THYROID: See also Goiter; Goiter, Exophthalmic; Hyperthyroidism; Hypothyroidism
antihormones, 492—E; 1456—E
Arteries: See Arteries
calorigenic action, [Lerman] 216—ab
cancer, treatment, [Pemberton] 1982—ab
desiccated, or thyroxine, 1645
diseased, roentgen rays action on, [Sunder-Plassmann] 1338—ab
disorders and cholesterolemia, 113—E; [Epstein] 507—C
disorders, relation to adjoining organs, [Wegelin] 636—ab
THYROID—Continued
dysfunction, iodine in blood and urine and basal metabolic rate, [Elmer] 80—ab
Excision: See Thyroidectomy
Extract: See also Thyroxine
extract, blood cholesterol and increased metabolism from, [Cutting] 525—ab
extract in endocrine dwarfism, [Engelbach & Schaefer] *464
function and course of tuberculosis, [Schedtler] 455—ab
function and febricula, [Macchioro] 952—ab
hypertrophy (compensatory), effect of iodine on, [Hoshiko] 1996—ab
insufficiency (atypical), reducing in, [Stark] 224—ab
insufficiency, iodine tolerance test, [Elmer] 869—ab
ovary and, mutual relations, 55
pituitary (anterior) acid extract effect on, [Scowen] 2057—ab
resistance to stimulating substances, 1456—E
tissue under influence of growth stimuli, [Silberberg] 1740—ab
Toxic: See Goiter, Exophthalmic
transplantation of living grafts, [Stone] 1886—ab
tumor, sarcoma, intense radium therapy, 1867
THYROIDECTOMY, exophthalmos after, 699
in angina pectoris [Weinstein] 369—ab; [Brenner] 1810—ab
in congestive heart failure, [Brenner] 1810—ab
in diabetes mellitus, 1238—E
in heart disease, [Jensen] 287—ab; [Davis] 1805—ab
pressoreceptor nerves and thyrotoxic crises, 31—E
THYROXINE or desiccated thyroid, 1645
peptide of, from gastro-intestinal tract, effect of alkali on, [Thompson] 1985—ab
use in ophthalmology, [Jameson] 1983—ab
TIBIA, transplant to replace external malleolus, [Noetzel] 1660—ab
TIC DOULOUREUX: See Neuralgia, trigeminal
TICK BITE Fever: See Spotted Fever
TIGUE, RICHARD, investigated, 1242
TILTON, LESTER J., restrained from practicing, 1545
TINEA: See Ringworm
TINTED Lenses: See Glasses
TISSUE: See also Epithelium; Pelvis; Peritoneum; Skin; Thyroid
carotene content in human, 850
Extract: See Uremia
proteins, composition, 756—E
subcutaneous, functions of, 2043
Swelling: See Arthritis
treatment of neoarsphenamine leakage into, 1014
vitamin C in human, 1626—E
TITLES, abolished in advertisements, Japan, 1553
TOBACCO: See also Nicotine
cigaret smoking effect on peripheral vascular system, [Wright & Moffat] *318
cough in cigaret smokers, 626
smoking, effects, 1382—E
TOE Exercise: See Foot imbalance
TOGO, Admiral, and his family physician, Dr. N. Kato, 770
TOMATOES, catsup, California Home Brand, 261
histamine-like action of substance in, [Gleichmann] 1267—ab
juice, Approval, 1379
juice, Cedar Hill Brand, 1379
juice, Crosse & Blackwell, 755
juice, Frankford Brand, 1453
juice, Milton, 111
juice, Muri Brand, 1379
juice, N. J. C. Brand, 1379
juice, New State Brand, 1379
juice, Ritter, 1069
juice, Thames Valley, 1709
Stokely's for Baby, 110
TOMORY, D. M., death, 852
TONALL, 429—BI
TONGUE, actinomycosis, 362
burning of, 1971
in gastroduodenal ulcer, [Dobreff] 302—ab
tuberculous ulcer, 1877
TONSILLECTOMY, gag reflex in, 513
hemorrhage after, delayed, 1971
in asthma, 514
in cardiac patients, 620
in tuberculous adults, [Newhart] 1262—ab
indications, [Dean] *1044
TONSILS, cancer, insulin injection for, 702
factor in rheumatic infection in children, [Kaiser] *890
function, [Dean] *1044
in puberty, [Feller] 1416—ab
lympho-epithelioma, [Cappell] 715—ab
port of entry in tuberculosis, [Schlittler] 531—ab
roentgen treatment, 1328
TOOTH: See also Teeth
brushes, number, among school children, Dresden, 1961
TOPMOST Pineapple Juice, 219

TORCULAR HEROPHILI, cross sections of vessels that form, [Gibbs] 868—ab
TORRINGTON Creamery Vitamin D Milk, 839
TORULOSIS, generalized, with Hodgkin's disease, [Fitchett] 1100—ab
TOURNIQUET, for kidney pedicle, [Timberlake] 360—C
TOWERT, E. S., death, 1962
TOXEMIA, alimentary, in infants, [Csapó] 534—ab
alimentary, intravenous drop infusions for, [Schmiedeberg] 535—ab
of Pregnancy: See Pregnancy
TOXIN: See also Dysentery; Menstruation; Scarlet Fever
bacterial, fail to produce granulocytopenia with, [Meyer] 71—ab
bacterial, lethal effects, vs. oil emulsions, [Myers] 449—ab
Coley's, Council report, 1067; 1070—E
edema due to, [Busson] 1108—ab
TOXOID: See Diphtheria; Scarlet Fever; Tetanus
TRACHEA, Injections into: See Hemoptysis
TRACHOMA, school for children with, 1787
TRANSFUSION: See Blood Transfusion
TRANSILLUMINATION: See Testicles
TRANSPLANT: See Kidney; Skin; Tibia
TRANSPLANTATION: See Bone grafts; Parathyroid; Sterilization, Sexual; Thyroid; Tumor
TRAUMA: See also Accidents; Football injuries; under organs and diseases as Brain; Cranium; Heart; Heart dilatation; Hematoma; Myiasis; Neurosis; Peptic Ulcer; Tuberculosis; Uveal Tract; under Medicolegal Abstracts at end of letter M
fatal shock, [Herbst] 795—ab
influence in gonad tumors, [Willis] 1337—ab
pulmonary embolism in, [Vance] 1806—ab
TREES: See Oak wood
TRICHINELLA spiralis, treatment, [Brown] *660
TRICHINOSIS, incidence, 497; 758—E
TRICHLORETHYLENE: See *tri*Chlorethylene
TRICHOMONAS vaginalis, filtrate treatment, 511
vaginalis vaginitis, [Karnaky] 1572—ab
TRICHOPHYTON extract test in eczema, [Hill] *331
TRICHOPHYTOSIS, treatment, [Fantus] *832
TRICHURIASIS, treatment, [Brown] *656
TRIETHANOLAMINE-Carbide and Carbon Chemicals Corporation, 491
TRINITROPHENOL: See Osteomyelitis
TRINITROTOLUENE, industrial hazards, 434
TRIORTHOCRESYL PHOSPHATE: See *tri-ortho*Cresyl Phosphate
TROPHOBLAST, activity in extra-uterine pregnancy, [Kaplun] 1110—ab
TROPICAL Anemia: See Anemia
Medicine, ninth International Congress on, 616
TROPICS, malaria in, 504
prevention of disease in, 1559
psoriasis in, [Pardo-Castello] 206—C
TROTSKY, R. N., 1966—BI
TRUDEAU celebration, Minnesota, 1241
TRYPANOSOMIASIS, transmission, [Thomson] 1573—ab
treatment trisulphuric acid (germanin), [Duke] 530—ab
TRYPARSAMIDE and optic atrophy, 1253
in optic nerve syphilis, 434; 861
TRYPSOGEN-Carnrick, 1782—E
TRYPTOPHAN TEST: See Meningitis, tuberculous
TUBE: See Eustachian Tube; Jejunal Tube; Stomach Tube; etc.
TUBER CINEREUM: See also Infundibulo-Tuberian Syndrome
heat regulation and, 930
TUBERCLE BACILLUS bacillemia and acute articular rheumatism, [Meersseman] 634—ab
bacilluria, experimental, [Montgomery] 524—ab
cod liver oil effect on, [Löhr] 955—ab
expectoration of, in apparently normal children, [Faure] 450—ab
filtrable form, [Flu] 536—ab
heat-killed, protective inoculation in infants with, [Goodwin] 1889—ab
in blood and spinal fluid in nervous disorders (Löwenstein method), 503
in blood (Löwenstein demonstration), [Busson] 886—ab; 1966
in urine, [Wildbolz] 636—ab
TUBERCULIN, natural, prepared from fractured bacilli, [Weinzirl] 441—ab
nuclear deviation in infantile tuberculosis, [Blanco] 719—ab
protein vs. old, [Barnwell] 1483—ab
purified, 502
skin sensitiveness to, in children, [Stewart] *176; 502
Test: See also Mantoux; Tuberculosis
test, 435
test, comparative study of Pirquet, Mantoux, Moro, [Kayne] 1490—ab
test, intracutaneous quantitative, in active tuberculosis, [Ayman] *154
TUBERCULIN—Continued
testing and incidence of tuberculosis, 935
testing of cattle, Minnesota, 1075
TUBERCULOID reaction in lymph nodes, [Laymon] 1807—ab
TUBERCULOSIS: See also Tuberculosis, Pulmonary; under names of specific organs and diseases; and under Medicolegal Abstracts at end of letter M
age and, [Kalbfleisch] 1895—ab
allergic disease (asthma) and, [Bray] 1410—ab
allergy, Mantoux test in assessing, [Westwater] 1491—ab
blood sedimentation rate, [Silitzbach] 441—ab; [Balanescu] 1744—ab; [Thiele] 1895—ab
blood sedimentation speed vs. serum calcium, [Kurakane] 1413—ab
bovine, eradication, 52
bovine, eradication, regulations, U. S., 196
bovine, quarantine farms, 198
campaign, (China) 420; (Germany) 2041
committee, report, New York City, 686
complement fixation test in, 1795
complicating measles, 701
complications, syphilis, treatment, 1396
conference in Warsaw, Brazil representatives, 1553
conference, Philadelphia, 846
conference, Rocky Mountain, 685
conference, St. Louis, 1715
control, central for detecting, Germany, 767
control, convention, Italy, 1465
control program, Georgia, 1158
control, program, New York, 1715
course and thyroid function, [Schedtler] 455—ab
diabetes mellitus and arteriosclerosis, 1560
diagnosis campaign, report, Connecticut, 1314
diagnosis, in children, [Mantz] 289—ab
diagnosis, Lenzi reaction, [Lenzi] 1659—ab
diagnosis, Meinicke seroreaction, [Meinicke] 303—ab
diagnosis, quantitative intracutaneous tests in, [Ayman] *154; [Lichtenstein] 1022—ab
effect of initial infection on subsequent lesions, [Myers & Harrington] *1530
erythema nodosum, 1791
experimental, Ninni's, [Mikulowski] 1186—ab
gonad function and, [Neurath] 1578—ab
hereditary factor, [Schuberth] 148—ab
Immunization, B C G, 1327
Immunization, B C G, in childhood, [Wallgren] *1341
Immunization in infants with heat-killed tubercle bacilli, [Goodwin] 1889—ab
in Children: See also Tuberculosis, Immunization, B C G
in children, 501
in children, skin sensitiveness to tuberculin in, [Stewart] *176
in children, treatment, [Berger] 290—ab
in children, viosterol effect on, [Poncher] 1181—ab
in French army, 1244
in infants, nuclear deviation in, [Blanco Otero] 719—ab
in infants, rôle of filtrable virus in, 1389
in nurses, 1968
in storm troops, unrecognized, Germany, 423
incidence and tuberculin testing, 935
incidence, in sexes, 120
influences adverse to patients, [Keddie] 1573—ab
Mississippi Valley Tuberculosis, 928
mortality, England, 1388
mortality rate, Canada, [Macklin] 1892—ab
nasal and pharyngeal secretion in, 127
National Tuberculosis Association Christmas Seal, 1317
Pan American Congress on, 1318
Papworth village settlement for patients, England, 847
Prevention: See Tuberculosis, Immunization, B C G
sanatorium directory, 52
sanatorium, furlough plan, Pennsylvania, 1386
sanatorium, new record forms, 1717
Society for Prevention of (20th conference), 270
state division approved, Missouri, 762
survey, Missouri, 1545
survey, report, District of Columbia, 349
symptoms during menstruation, [Kriech] 455—ab
therapeutic abortion in, [Pottenger] *1907
tonsillectomy in adults, [Newhart] 1262—ab
tonsils as port of entry in, [Schlittler] 531—ab
traumatic, [von Meyenburg] 531—ab
treatment, calcium, 1560
virus (filtrable), is there one? 1321
virus (filtrable), rôle in pediatrics, 1164
TUBERCULOSIS, PULMONARY, activity, monocyte-lymphocyte ratio, [Muller] 1025—ab
after sunbaths, [Gosse] 715—ab
artificial pneumothorax after thoracoplasty? 2049
artificial pneumothorax in, [Cutier] *81; [Henske] 290—ab; [Myers] *1301
TUBERCULOSIS, PULMONARY—Continued
artificial pneumothorax in diabetics with, [Wiener] 1022—ab
artificial pneumothorax in, leukocyte counts during, [Deegan] 1180—ab
artificial pneumothorax in, shifting electrical axis of heart in, [Treiger] 215—ab
blood cholesterol in, [von Baharczy] 635—ab
blood picture in, [Cold] 1818—ab
blood sedimentation speed in, [Thiele] 1895—ab
blood serum proteins, [Pagel] 717—ab
cavities changes from paralysis of diaphragm, [Slavin] 441—ab
cavity (huge tension) in primary, [Sanes] 872—ab
chronic, leukocytosis in, [Elrick] 1182—ab
complications, acute massive atelectasis, [Stivelman] 523—ab
complications, intestinal tuberculosis, [Boles & Gershon-Cohen] *1841
diagnosis, detecting, 620
diagnosis (differential) of silicotuberculosis, [Uehlinger] 878—ab
diagnosis, roentgen micronodular images, [Dutrey] 380—ab
fraudulent fevers, 511
hemoptysis, treatment, [Courcoux] 1029—ab
in asthma, [Fraenkel] 1573—ab
infiltrates and carbohydrate metabolism in childhood, [von Mettenheim] 1108—ab
lung consolidations in, [Alkaran] 75—ab
menstruation in, and the sympathetic, [Smilovits] 1413—ab
phrenic exeresis, [Bodungen] 455—ab
phrenicectomy, abdominal complications, [Longuet] 531—ab
phrenicectomy, anatomic diaphragm changes in, [Stanbury] 215—ab
phrenicectomy, death after, [Weber] *107
phrenicectomy, diaphragm function renewed after, [Jeanneret] 301—ab
phrenicectomy, using incisions only 8 to 10 mm. long, 426
primary infection, what does it prevent? [Stewart] 1336—ab
referred abdominal symptoms in, [Brown] 297—ab
silica inhalation effect on, [Gardner] *743
surgical treatment, extrapleural pneumolysis with paraffin pack, [Head] 949—ab
thoracoplasty, 2049
thoracoplasty, blood sugar increase after, [Scharff] 225—ab
thoracoplasty, fate of "good chronic" case, [Brown & Sampson] *913
treatment by bronchial occlusion, [Adams] 1024—ab
treatment, plaster-of-paris cast with large window, [Gilronés] 953—ab
treatment, respiratory, [Hofbauer] 1893—ab
TUCKER'S Asthma Specific, 1728
TUITION: See Schools, Medical
TULAREMIA, immunity development with each succeeding attack, 861; 1256
intrathoracic changes in, [Blumberg] 527—ab
treatment, neoarsphenamine, [Shellhorn] 218—ab
TUMORS: See also under organs and specific types of tumors
Argentaffine: See Appendix
diagnosis, Ascoli serum reaction, [Verceni] 1659—ab
giant cell, or sarcoma, 361
Glomus: See Glomus
growth, ischemia effect on, [Orr] 74—ab
hour-glass or dumb-bell, [Harrington & Craig] *1702
Inflammatory (nonspecific) of large intestine, [Anschütz] 953—ab
Krukenberg: See Ovary
Malignant: See also Cancer; Sarcoma
malignant, experimental alteration, [Casey] 1097—ab
Registry: See Brain tumor
transplanted, effect of spleen on growth, [Matsuoka] 221—ab
TWIN Pines Farm Dairy Vitamin D Milk, 1623
TWINS, births in Germany, 122
criminality in, 1080
diabetes mellitus in, [White & others] *105
epilepsy in, etiology, [Rosanoff] 293—ab
research on, 1721
TWITCHING: See Muscles
TYMPANIC Membrane: See Ear
TYMPANY: See Abdomen
TYPHOID: See also under Medicolegal Abstracts at end of letter M
bacillus, B, alkalescens a variant, [Gilbert] 213—ab
bacillus, new antigen "VI," [Felix] 951—ab
"bilivaccin" still experimental in, 626
carrier discovered, Baltimore, 925
carriers, children as, [Laessing] 78—ab
flies, filth and bacteria, 921—E
from spring water, Virginia, 927
hemagglutination reaction in, [Bachmann] 1107—ab
in Decatur, Alabama, 761
leukocytometric formula in, [Parini] 1338—ab
leukopenia in, genesis, [Hashimoto] 1893—ab

TYPHOID—Continued
outbreak in circus performers, 350; 417; [Freund] 622—C
outbreak in firemen, Chicago, 116
outbreak, Indiana, 194
outbreak traced to benefit supper, Baltimore, 686
paratyphoid vaccine, discontinued, Georgia, 1073
paratyphoid vaccine, U.S. Army, change in, 197
peritonitis, 1867
prevention in tropics, 1559
shellfish and fuel oil, 1865
symptoms in blood diseases, [Klima] 1816—ab
treatment, bacteriophage, [Eaton & Bayne-Jones] *1851
Vaccination: See also Immunization, simultaneous
vaccination, agglutinin response to, [Stuart] 1739—ab
vaccination and gastro-intestinal symptoms, 360
vaccination, protection afforded by, 62
Vaccine: See also Chorea treatment
Vaccine (Merrell), 1947
vaccine, "smooth" vs. "rough," 346—E
TYPHUS exanthematicus, campaign against, Rumania, 1635
mouse, Paris region, 199
TYROSINOSIS, [Blatherwick] *1933
TYROSINURIA: See Urine

U

UCOLINE Cod Liver Oil Concentrate, 1378
ULCER: See also Abscess; Bladder; Colitis, ulcerative; Peptic Ulcer; Vulva
necrotizing, complicating erysipelas, [Stookey & others] *903
procaine hydrochloride blocking of nervous system, [Vishnevskiy] 149—ab
prognosis in massive hemorrhage from, [Christiansen] 1818—ab
Tuberculous: See Tongue
Varicose: See Varicose Veins
ULNA, injury, bone graft after, 513
ULTRARED RAYS, cataracts, caused by, [Schläpfer] 878—ab
ULTRAVIOLET RAYS blood iodine content and, [Bennholdt-Thomsen] 303—ab
cataracts caused by, [Schläpfer] 878—ab
generators (cold quartz) reaccepted, 1621
glass, Uviol-Jena Ultraviolet Transmitting Glass, 1946
Irradiated Substances: See Milk, vitamin D; Viosterol
Lamps: See also Sunlamps
lamps, Fischerquartz "Cold," 1620
lamps, tax on, used in hospitals, 198
radiation, skin color after, [Rogin] 73—ab
radiation, skin reaction to, [Peacock] 74—ab
radiation, sources, [Coblentz] *183; *254
source of, factors influencing choice, [Laurens] *1447
UMBILICAL CORD Hernia: See Hernia
hydrogen ion concentration, [Mikawa] 221—ab
UMBILICUS, paranavel colic in children, 1562
UNCLE SAM Brand Syrup, 1229
UNDULANT FEVER carrier cows, [Thompson] 871—ab
chronic brucellosis, [Evans] *665
dermatitis from treating infected cows, 774
diagnosis, serologic, [Laun] 1896—ab
immunity, developing with each succeeding attack, 861; 1256
in Germany, 2042
meningitis, [Hartley & others] *251
treatment, O'Neil's immune serum, 512
treatment, vaccine, 63; [Bianchi] 223—ab
UNITED Brand Evaporated Milk, 111
Dairies Vitamin D Milk, 1623
Dairy Vitamin D Milk, 919
Hospital Fund: See Hospitals
Medical Service, Inc., 266
Milk Company Vitamin D Milk, 341
UNITED STATES Army: See Army
Civil Service Commission announces position for parasitologist, 1461
Congress: See Congress, U. S.
Employees' Compensation Commission: See Workmen's Compensation Acts
Food and Drugs Act: See under Food
Pharmacopeia: See Pharmacopeia
Public Health Service: See Health
Science Advisory Board: See Science
UNIVERSITY: See also under names of specific universities as Harvard; Ohio State; Yale; etc.
German universities, 200; 1004
of Bern, prize for encephalitis, 1001
of Birmingham, 197
of California, 924; 1544
of Chicago, 761
of Cluj, 425
of Liverpool, centenary, 197
of Michigan, 1955
URBACH'S Necrobiosis: See Necrobiosis
UREA, clearance, posterior pituitary hormone effect on, [Bjering] 956—ab
clearance test, technic, 511
excretion, 995—E
in Blood: See Blood
in Urine: See Urine
UREA—Continued
Quinine Injection: See Hydrocele
water economy and, 416—E
UREMIA, form of, with increase in rest nitrogen and sodium chloride loss, [Kohlschütter] 302—ab
treatment, tissue extract, [Schwarzmann] 1578—ab
URETERS anastomosis (aseptic intestinal), [Higgins] 295—ab
calculi, glycerin therapy, [Lickint] 224—ab
calculi, not producing shadows, demonstration, [Pflaumer] 381—ab
catheterization and pyelitis of pregnancy, [von Mikulicz-Radecki] 456—ab
denervation for renal colic, [Hepburn] 446—ab
occlusion after radium implantation in cervix, [Bugbee] 1987—ab
Roentgen Study: See Pyelo-Ureterography
URETHANE-Dial: See Anesthesia
URETHRA, imperforate (congenital), 3 cases, 126
discharge (persistent) after gonorrhea, 1972
prostatic, reflex pain from, 281
URETHRITIS, Gonorrheal: See Gonorrhea
nonspecific, 1642
Surgery: See also Prostate resection
surgery, transurethral, [Caulk] 216—ab
URINARY BLADDER: See Bladder
URINARY TRACT: See also Bladder; Genito-Urinary Tract; Kidney; Ureters; Urethra
anomalies, congenital, [Wiseman] 1407—ab
calculi formation, [Barney & Mintz] *741
calculi, interpreting shadows in urogram, [Wilhelmi] 288—ab
infection, bacteriophage therapy, [Eaton & Bayne-Jones] *1848
infection, colon bacillus, 2039
infection, diagnosis; prevention, [Hammond] 298—ab
infection, ketogenic diet for, [Goodman] 526—ab
URINE, acids (organic) in, in childhood, [Siwe] 1998—ab
Albumin: See Albuminuria
calcium oxalate crystals in sediment, [Mauge:l] 302—ab
citric acid excretion vs. citric acid and sodium bicarbonate, [Schuck] 375—ab
citric acid excretion vs. orange juice and grape juice, [Schuck] 374—ab
creatinuria, glycine effect on, in peripheral neuritis, [Allinson] 1735—ab
creatinuria in adolescent, ephedrine sulphate orally effect on, [Light & Warren] *410
creatinuria in, muscular dystrophy, etc., [Tripoli & others] *1595
estrin excretion, [Robson] 220—ab
fructosuria, essential, [Silver] 1484—ab
Hemoglobin in: See Hemoglobinuria
incontinence, 1474
incontinence, nocturnal enuresis, [Earl] 1490—ab
iodine, diagnostic value, [Elmer] 80—ab
ketonuria after local anesthesia, [Calzolari] 77—ab
of Pregnant Women: See Pregnancy, diagnosis; Pregnancy urine
oxaluria, in glycogen metabolism alterations, [Battistini] 1814—ab
pentosuria of 13 years' standing, [Salzman] *483
Protein: See also Albuminuria
protein in, simple method for estimating, [Wahl] 795—ab
Pus in: See Pyuria
reaction after gastric resection, [Lion] 78—ab
Sex Hormone Extract: See Androtin
sex hormone (hypophyseal) in, of old men, [Kukos] 534—ab
specific gravity (low), 625
specific principle in, in cancer, [Aron] 450—ab
suppression, anuria after diabetic coma, hypertonic salt solution relieves, [Root] *482
suppression, anuria and oliguria in eclampsia, [Spickmann] 226—ab
suppression, anuria caused by corrosive mercuric chloride, peritoneal dialysis for, [Balázs] 722—ab
testicular, sex, and gonad-stimulating hormone in, [McCullagh & Renshaw] *1140
therapeutic use, auto-urotherapy, [Krebs] 1743—ab
Tubercle Bacillus in: See Tubercle Bacillus
tyrosinuria, 30—E
urea-blood urea relation, [Cottet] 301—ab
UROBILINOGENURIA in early diagnosis of liver diseases, [Fischler] 1107—ab
UROBILINURIA in early diagnosis of liver diseases, [Fischler] 1107—ab
UROGRAM, interpreting shadows in, [Wilhelmi] 288—ab
UROGRAPHY, Diodrast (N. N. R.) intravenously, 109
excretory, after neoskiodan subcutaneously, [Beer & Theodore] *181
UROLOGY, French Congress, 1632
Hippuran (sodium ortho-lodihippurate) for, 412
intravenous, for urogenital fistulas, [Dobrzaniecki] 876—ab
UROLOGY—Continued
spinal anesthesia in, [Foulds] 72—ab
triumphs, 1667—ab
UROTROPIN, N. N. R., 109
URTICARIA at menopause, 1326
etiology, [Uhlmann] 78—ab
etiology, cold, 996—E; [Sutton] 1325—C; (early references) [Feinberg] 1725—C
USEMORE Brand Syrup, 1379
UTAH Wasatch Dairy Inc. Vitamin D Milk, 1623
UTERUS adnexitis, Weltmann's coagulation band in, [Purper] 304—ab
cancer (cervical), early histologic diagnosis, [Schmitz & Benjamin] *808
cancer (cervical) in pregnancy, [Miller] 1182—ab
cancer (cervical) in pregnancy, radium for, [Hofmann] 1188—ab
cancer (cervical), radon for, [Simpson] 1026—ab
cancer (cervical); ureteral occlusion after radium implantation, [Bugbee] 1987—ab
cancer (cervical), vaginal fistulas in, [Smith] 1567—ab
cancer, ferments in, [Nakahori] 790—ab
cancer (fundus), vaginal hysterectomy in, [Horsley] 371—ab
cancer (portio), [Schiller] 1980—ab
cancer, radium for, 1864
cancer, results of prolonged irradiation, [Jones] *1678
cervical erosions, laceration, and endocervicitis in late puerperium, electrocoagulation for, [Barrett] *1516
cervix, effects of mercurochrome on, 703
cervix, electrocoagulation in chronic endocervicitis, 1878
Cervix, Gonorrhea: See Gonorrhea
cervix, local argyrosis, [Dworzak] 955—ab
contractions, obstetric electrography, [Clason] 724—ab
cornu, sterilization by coagulation of, [Hyams] 783—ab
cystic mole, site of formation of gonadotropic substances, [Remzi] 1416—ab
excision, menopausal symptoms after, [Tomis] 783—ab
hemorrhage (benign), radium for, [Naujoks] 1416—ab
hemorrhage during menopause, 1719
hemorrhage, radium and roentgen rays for, [Schmitz] 1333—ab
hemorrhage, recurrent, 1174
hemorrhage, vaginal ligation of uterine arteries in, [Henkel] 79—ab
hydatidiform mole, clinical aspects, [Sommer] 879—ab
hydrometra after intra-uterine radium irradiation, [Vogt] 1495—ab
Mucosa: See Endometrium
prolapse, operations for, [Bonney] 1992—ab
prolapse ulceration, vesicovaginal fistula resulting, [Ratnayeke] 1105—ab
replacement after delivery, [Drosin] 1981—ab
surgery, suspension operation, 362
tamponade in atonic uterine hemorrhages, [Kiss] 1266—ab
tamponade replaced by examination plus hypophysine intravenously, [Reiles] 531—ab
tumor, myoma praevium, delivery in, [Koller] 723—ab
tumor, myoma, torsion of axis, [Schweigl] 723—ab
tumor, torsion of fibromatous uterus, [McIver] 1810—ab
UTRICULO-ENDOLYMPHATIC VALVE, function, [Bast] 69—ab
UVEAL TRACT, sarcoma after trauma, [Stieren] *311
UVIOL-JENA Ultraviolet Transmitting Glass, 1946
UVULA, absence after tonsillectomy, 63

V

VACCINATION: See also Immunization; Poliomyelitis; Psittacosis; Smallpox; Typhoid; Whooping Cough; under Medicolegal Abstracts at end of letter M
elective site for, 704
from legislation viewpoint, 1006
law enforced, Baltimore, 925
VACCINE: See also Gonococcus; Plague; Pneumococcus; Poliomyelitis; Rabies; Streptococcus; Typhoid
A. M. A. Exhibit on, Atlantic City Session, 1953
autogenous, in nasal allergy, [Cox] 1988—ab
autogenous, in peritonitis, [Anderson] 1406—ab
bacterial, mechanically disrupted, 348—E
Therapy: See under Actinomycosis; Arthritis; Endocarditis lenta; Gonorrhea; Sinuses, Nasal, infection
VACCINIA virus, effect of temperature, [Amies] 376—ab
VACUUM Packing: See Food storage
VAGINA, approach to uterine arteries, [Henkel] 79—ab
bacteria in, relation to puerperal sepsis, [Watson] *1745

VAGINA—Continued
bleeding in new-born, 1970
Fistula: See Fistula
VAGINITIS, Gonorrheal: See Gonorrhea
Hysterectomy: See Uterus cancer
Trichomonas vaginalis: See Trichomonas
tumor fibroma, resembling cystocele, [Mattson] ★409
VAILSPAR, possible benzene poisoning with granulocytopenia, 1560
VAN'S (Billy B.) Pine Tree Ointment, 429—BI
VAPEX, 429—BI
VAPORS: See Asphalt; etc.
VAQUEZ'S Disease: See Polycythemia
VARICELLA: See Chickenpox
VARICOSE VEINS, eczema with ringworm infection, 1396
injections, complications in, [Brand] 1794—C; (reply) [Frohman] 1794—C
of vulva, injection treatment, 626
treatment, "spider burst," treatment, 1013
ulcer after injection, 1088
ulcers and peptic ulcers have features in common, [Riddle] 874—ab
VAR-NE-SIS for Rheumatism, 204—BI
VARSITY Extra Pale Dry Ginger Ale, 1855
VAS DEFERENS, subcutaneous vasoligation, [Short] 295—ab
VASODILATION: See Vasomotor mechanism
VASOMOTOR MECHANISM Neurosis: See Neurosis
vasodilating effect of theobromine, [Newell] 1104—ab
vasodilators, effect on peripheral blood circulation in arthritis, [Kovacs] 1803—ab
VEGETABLES, strained, brands accepted, 111; 919
test of vegetarian diet, 1318
uncooked, source of amebiasis, [McCoy & Chesley] ★1145
VEINS: See also Blood Vessels; Phlebitis; Thrombophlebitis
blood from: See Blood [name]; Blood venous
determination of velocity of blood in vein of arm, [Homma] 1414—ab
ectasia or melanoma, 1646
innominate, obstruction in upper mediastinum, [Pilcher] 784—ab
Jugular: See Aneurysm
ligation, simultaneous, [Brooks] 1887—ab
Portal: See Portal Vein
Pressure: See Blood Pressure, venous
repair, [Dixon] ★1129
stasis effect on heterotopic bone formation, [Roome] 786—ab
VELDEE'S Toxoid: See Scarlet Fever immunization
VELVO Pasteurized Homogenized Milk, 681
VENA CAVA, obstruction in upper mediastinum, [Pilcher] 784—ab
VENDEL'S Solution: See Hydrocele
VENEREAL DISEASE: See also Gonorrhea; Syphilis
control, abolish licensed prostitution, Japan, 202
control, Germany (prohibit marriage), 931; (difficulties) 1633
crusade in hospitals, 424
prevention, Italy, 563
reporting, U. S., 53
treatment, official scheme, England, 1388
VENESECTION, improves oxygen saturation of arterial blood, [Hitzenberger] 1414—ab
VENOCLYSIS and intravenous therapy, terminology, [Hendon] 1641—C
VENOM, Bee: See Rheumatism, treatment
VENTRICLES: See Brain; Heart insufficiency
VENTRICULAR FIBRILLATION, quinine and quinidine in, [Schwartz] 1097—ab
VENTRICULOGRAPHY: See Brain
VERBIGERATION: See Pallialla
VERMICELLI Fideos, Fontana's, 1229
VERNES TEST, [Díez Melchor] 1265—ab
VERNONIA anthelmintica, [Chopra] 1027—ab
VERRUCA, prophylaxis of seed warts, 1647
treatment, bismuth salicylate intramuscularly for warts on face, 775; (reply) [Lurie] 1399
treatment, bismuth sodium tartrate, [Shellow] 1654—ab; (correction) 1898
treatment, Donovan's solution, 1014
vulgaris, autolysate therapy, [Cormia] 785—ab
warts on eyelid, 209
VERTIGO from working with handy repair cement, 281
VESTIBULAR Disorders: See Ear
VESTVOLD'S Orificial Magno-Vibrator, 992
Photo-Electric Dilator, 992
VETERANS Home (Danville, Ill.) to be a neuropsychiatric facility, 420
hospital opened, California, 1239
VETERINARIANS, International Congress of, 196
"VI" Antigen: See Typhoid bacillus
VIBRATOR, Vestvold's Orificial Magno-Vibrator, 992
VIBRION Septique: See Bacteria, clostridium
VICTOR Flour, 261
VICTOREEN r-Meter, 1946
VIENNA Faculty of Medicine and American students conflict, 1248
VILLAGE Settlement: See under Tuberculosis
VINCENT'S Infection: See Angina; Spirochetosis
Serum: See Streptococcus
da VINCI, LEONARDO, knowledge of embryology, 768
VIOFORM: See Amebiasis treatment
VIOSTEROL action, [Spies] 300—ab
cod liver oil concentrate with, Squibb Adex Tablets 10-D, 754
effect on common cold, [Shibley & Spies] ★2021
effect on tuberculous children, [Poncher] 1181—ab
VIRUS: See Antivirus; Encephalitis, Epidemic; Influenza; Lymphogranuloma inguinale; Tuberculosis; Vaccinia; Yellow Fever; etc.
VISCERA: See Perivisceritis
VISCOSITY: See Feces
VISION, Defective: See also Blindness
defective, educating partially sighted children, England, 848
does Credé method of instilling silver nitrate impair? 777
spasms, postencephalitic, [Engerth] 1414—ab
VITA-CELL, 1309
VITAL CAPACITY, estimation in pulmonary fibroses, [McCann & others] ★810
VITAL STATISTICS: See also Population
birth rate and causes of death, Dutch East Indies, 425
birth rate and infant mortality rate, Japan, 1322
birth rate, declining, England, 1388
birth rate, France, 354
birth rate, lowest, U. S., 352
birth rate, number of living births in Europe, 56
birth rate, record low, Pennsylvania, 1386
birth registration campaign, Kansas, 1628
death rate, declining, England, 1388
death rate (high), heat wave brings, Missouri, 418
death rate in large cities, U. S., 1243
death rate, occupational, U. S., 846
death rate (record low) in 1933, U. S., 1461
morbidity reporting area, Indiana in, 999
Mortality: See also Heart disease; Infants; Maternal mortality; etc.
mortality and morbidity, [Levy] 1725—C; [Sanford] 2046—C
mortality during 1933, Germany, 1721
mortality, geographic distribution, U. S., 1787
of England, 198
of Germany, 1960
of Italy, 1868
of Spain, 1391
trend of infectious diseases of childhood, 682—E
VITALIZING Tablets, 429—BI
VITAMINS A: See also Carotene; Cod Liver Oil; Halver Oil
A and C deficiencies, follicular lesions in, [Scheer] 1022—ab
A and D, relation to calcium salts and phosphates in food, [Mølgaard] 382—ab
A and resistance to infection, 994—E
A deficiency, nutritional xerophthalmia, [Thorson] ★1438
A, effect on common cold, [Shibley & Spies] ★2021
A, local application in wounds, [Horn] 721—ab
A, sources, 1285—ab
A, utilization, 1540—E
avitaminosis, alimentary disorders resulting, [Schiødt] 1898—ab
avitaminosis, effect on infection, [Takahashi] 1996—ab
B, Mead's Dextri-Maltose with, 260
B, Yeast Vitamin-Harris Tablets, 1378
B_2: See Anemia, Pernicious, treatment
C: See also Acid, cevitamic; Hemophilia; Scurvy
C and propagation, [Vogt] 78—ab
C content of human tissues, 1626—E
C, effect on capillary resistance, [Schultzer] 1998—ab
C, estimation, [R. B.] 276—C
D and calcium in foods, 414—E
D and sunlight, 1434—ab
D concentrate, SMACO, 340
D concentrate, SMACO Carotene with, 340
D, diet and dental disease, 1162
D, effect, duration of [Hannon] 1411—ab
D effects on local atrophy and bone union, [Fischer] 869—ab
D in blood and in milk of cows fed irradiated yeast, 1935—E
D in hypervitaminosis D rickets, [Ham] 1337—ab
D Milk: See Buttermilk; Milk
discussion, 200
E claims for public advertising, Committee on Foods decision, 189
effect on catalase content of blood, [Jusatz] 147—ab
foods fortified with, Committee on Foods decision, 189
foods high in, effect in pregnancy, [Vogt] 1578—ab
insufficiency, local, [Balachovski] 1574—ab
research in pediatrics, 620
VITAMINS—Continued
standardization, international conference on, 353
storage, in body, 114—E
Yeast Vitamin-Harris Tablets, 1378
VITEX Laboratories Vitamin D Milk, 341; 1069; 1623; 2069
VITILIGO: See also Leukoderma
etiology, sunlight, [Anderson & Ayres] ★1282
etiology, sweat, [Roop] 788—ab
VITREOUS BODY, elastic properties, [Duke-Elder] 1027—ab
hemorrhages, juvenile recurring, 2040
VOCAL CORD, malignant tumor, [Baker] 633—ab
VOGT Brand Gelatin, 993
VOICE imitation in diagnosis of simulated deafness, [Baldenweck] 718—ab
VOMITING in infancy, 206; 704; [Ribadeau-Dumas] 1028—ab
of Blood: See Hematemesis
of Pregnancy: See Pregnancy
Postoperative: See Surgery
prognostic significance of black vomit, [Melchior] 1109—ab
VON TROMP, HEDRIK, impostor in Texas, 196
VREDEN, R. R., death, 769
VULVA, inflammation, 1562
lesion, 1559
neuritis, 1647
perforations of labia minora, [Stude] 296—ab
Pruritus: See Pruritus
tumor, hidradenoma, [Eichenberg] 1744—ab
ulcer (acute) with disease of skin and oral mucosa, [Talalov] 1807—ab
varicosities, injection treatment, 626

W

W. H. D. Special Stomach Medicine, 205—BI
WALDENSIAN Tar Heel Bread, 1379
WAPCO Brand Hawaiian Pineapple, 993
WAR: See also Army; Military; Soldiers; Veterans
Gas: See Gas warfare
injured, number in Germany, 1721
medical corps importance in, 1006
open, motorized units in, 1006
organization of sanitary cities and localities, 1007
Pensions: See Pensions
Prisoners of: See Prisoners
World, memorial services of American Ambulance of Neuilly, 1389
WARFIELD Energized Pure Cocoa with Vitamin B, 413
Premier Baking Chocolate, 1855
WARM SPRINGS Crystals, fraudulent, 1631
Foundation: See Foundations
WARNER'S Safe Diabetes Remedy, 697—BI
WARTS: See Verruca
WASP sting, treatment, 1474
WASSERMANN TEST, antigen for, diluting, [Kolmer] 135—ab
for barbers and beauticians, 1160
provocative, 1559
WATER: See also Drowning; Snow; Swimming Pools
carbonated, Poland Water Carbonated, 919
drinking, California's Pure Puritas, 564
drinking, improvement, Netherlands, 851
drinking, supplies, salt tablets in, in heat exposure, 1644
economy of, and urea, 416—E
elimination, by kidneys, anterior pituitary extract effect on, [Iversen] 1744—ab
Faucet: See Faucet
Gelatin Tolerance Test: See Liver function in Milk: See Milk
intake in edema, 1170
metabolism and convulsions, 362
metabolism, clinical appraisal, [Glassberg] 873—ab
metabolism, hydrolability in early infancy, [Burghi] 378—ab
Mineral: See Mineral Waters
shortage from prolonged drought, England, 500
softener manufacture, hazards in, 1726
softeners and dermatitis, 281
spring, Arrowhead, 261
spring, typhoid from, Virginia, 927
supplies, and health conditions in Spain, 1391
supplies, Endamoeba histolytica cysts removed by filtration, 348—E
supplies, prevention of disease in tropics, 1559
supplies, source of amebiasis, [McCoy & Chesley] ★1145
WATTS, R. C., investigated, Mississippi, 1242
WAYNE County Medical Society (Detroit) medical service plan, 759—ME
WEATHER: See also Climate
common colds and, 414—E
disease in relation to, 200
influence on eye disease, 1390
rôle in causation of death, 1391
sensitive children, 1163
WEBER Central Dairy Vitamin D Milk, 1623
WECKERLE (W.) & Sons Vitamin D Milk, 1709
WEDGWOOD Brand Pineapple, 1151
WEEDS, contact dermatitis from weeding potatoes, 1397
WEEVIL exterminator, chlorpicrine gas, toxicity, 774

WEIDEMAN Boy Brand Pineapple Juice, 919
WEIGHT: See Body weight; Infants, New-Born; Suprarenals
Reducing: See Obesity
WEIGNER, CHARLES, birthday, 123
WEIL'S Disease: See Jaundice, spirochetal
WELDER'S conjunctivitis, 512
WELDING, health hazards, 129
WELTMANN, O., death, 202
WELTMANN'S Coagulation Band: See Uterus, adnexitis
WENDT'S Dairy Vitamin D Milk, 1623
WEST COAST Dairy Vitamin D Milk, 2029
WESTERGREN Method: See Blood sedimentation tests
WESTERN Dairy Co. Vitamin D Milk, 919
Orthopedic Association, 1863
WETZEL, Norman C., on motion of growth, 2030—E
WHEAT: See also Bread; Cereals; Flour; etc.
allergy, diet for, 63
WHEELER, CLAYTON E., 1084—BI
WHIPWORM: See Trichuriasis
WHISKY, absorption from rectum, 1327
WHITE Cross Liver Medicine, 697—BI
Eagle Dairy Co. Vitamin D Milk, 1623
Spotting: See Leukoderma; Vitiligo
Swan Pineapple, 993
Swan strained products, 919
Villa Pineapple Juice, 919
WHITING Milk Companies Vitamin D Milk, 1709
WHOOPING COUGH cured by mumps, [Klinefelter] *1372
diagnosis, 1875
diagnosis; cough plate method; leukocytosis, 1174
diagnosis, cough-plate method simplified, [Barksdale] 1989—ab
treatment, gold tribromide, 282; 1797
trend of, in childhood, 682—E
vaccination in school children, [Frawley] *960; 1091; [Rosenbusch] 1740—ab
vaccines, mechanically disrupted, 348—E
WIELAND'S Vitamin D Milk, 919
WILKE Dairy Co. Vitamin D Milk, 1623
WILLIAMSPORT Milk Products Co. Vitamin D Milk, 2029
WILLOW Brook Dairy's Vitamin D Milk, 1151
Farm Products Vitamin D Milk, 1623
WINKING Reflex: See Reflex
WIRELESS: See Radio
WITNESSES, Expert: See Evidence
WOMAN'S AUXILIARY: See under American Medical Association
WOMEN in Medicine: See Medicine, women in; Physicians, women; Students, Medical, women
WOOD, plastic, possible benzene poisoning, 1560
cocobolo, facial eczema from, in flute player, [Meister] 2058—ab
WOOD, LEONARD WOOD MEMORIAL: See Leprosy
WOODLAWN Farm Dairy Co. Vitamin D Milk, 1623
WOOL, Glass: See Glass wool
WORCESTER SALT, 261
WORDS AND PHRASES: See Terminology; under Medicolegal Abstracts at end of letter M
Pathologic Repetition: See Palilalia
WORK: See Exercise; Exertion; Industrial
WORKMEN'S COMPENSATION ACTS: See also under Medicolegal Abstracts at end of letter M
disability in pulmonary fibroses, [McCann & others] *810
new, and Medical Association of South Africa, 852
physician allowed compensation for infection, Netherlands, 502
physician's fees allowed under, [Beebe] 855—C; (Bureau of Legal Medicine and Legislation comment), 855
U. S. Workmen's Compensation Commission, fees for C W A service, [Spillman] 1010—C
WORLD WAR: See Veterans; War
WORMS: See Heart worms
Parasitic: See Intestines
WOUNDS, accidental (fresh), therapy, [Fantus] *108; (reply) 1375
accidental, from broken porcelain faucet handle, [Maloney] *1618
closure in goiter operations, 634—ab
dry, electric air blower, [Burton] *338
gunshot, of pelvis, identifying semen stains after, 1255; (reply; postmortem ejaculation of semen) [Lefkowitz] 1878
healing, gamma-rays effect on, [Nathanson] 528—ab
irrigation, sodium hypochlorite for, 1089
suture of, of ascending aorta, [Blalock] *1617
WOUNDS—Continued
treatment, cod liver oil, [Löhr] 955—ab
treatment, cod liver oil salve, of fresh, [Löhr] 954—ab
treatment of superficial granulating, [Cannaday] 1189—ab
treatment, vitamin A ointment, [Horn] 721—ab
WRIST, carpal fracture dislocation, [Apfelbach & Scuderi] *672
WRITERS, National Association of Science Writers, 1076
WRITING: See also Handwriting; Language automatic, and Gertrude Stein, 1711—E

X

XANTHOMATOSIS, generalized, [Herman] 795—ab
with liver cirrhosis, [Schilling] 452—ab
XEROPHTHALMIA, nutritional, [Thorson] *1438

Y

YACHT CLUB Brand Corn Syrup, 1379
YAKIMA Laboratories Vitamin D Milk, 2029
YALE, brain tumor registry, 1630
fellowships for study of adolescence, 1783
YAWS: See Frambesia
YEAST: See also Fungi, yeastlike
Treatment: See Anemia, Pernicious; Pellagra
Vitamin-Harris Tablets and Brewer's Yeast-Harris, Medicinal, 1378
YELLOW CROSS: See *di*Chlorethylsulphide
YELLOW FEVER, immunity of Cubans to, 2040
virus, amount injected by mosquito bite, [Davis] 947—ab
YORK Sanitary Milk Co. Vitamin D Milk, 2029
YOU-THA-GAN, 429—BI
YUM for Headache, 429—BI

Z

ZINC Oxide: See Fistula, fecal
ZINN, P. R., death, 1962
ZIPPER bandages, [Pratt] *983
ZOALITE: See Burdick
ZOSTER: See Herpes zoster
ZUBIZARRETA, J. M., death, 1791

AUTHOR INDEX

In this Index are the names of the authors of articles which have appeared in THE JOURNAL, the names of those who have read papers before Societies as published in THE JOURNAL and those whose articles have been abstracted in the Current Medical Literature Department. The * preceding the page reference indicates that the article appeared in full in THE JOURNAL. For subject index see page 2061.

A

Abbott, A. C., *21
Abeles, M. M., 1264
Aberle, S. B. D., *314
Abernethy, T. J., 1652
Abeshouse, B. S., 1406
Adair, F. E., 710
Adamesteanu, C., 1106
Adams, W. E., 1024
Adams, W. L., 1481
Adeney, N. F., 790
Adler, L., 306
Adlercreutz, E., 1032
Adrio Mateo, J. A., 1575
Alkman, J., *640
Alberghina, G., 532
Albrecht, A., 1106
Aldred, C. N., 1490
Allen, C. H., *11
Allen, E. G., *1668
Allen, E. V., 1104, 1652
Allen, J. H., *892
Allen, R. B., 524
Alley, A., 2055
Allinson, M. J. C., 1735
Almela, J., 451
Alperstein, B. B., 870
Alter, N. M., 1489
Altmann-Pargmanik, 1661
d'Amato, H. J., 1742
Ambler, J. V., 294
Ambrus, J. V., 303
Ames, C. R., 376, 1891
Anderson, C. R., *1285
Anderson, H. H., 214, 214
Anderson, J. G., 1406
Anderson, L. E., 1023
Anderson, M. X., 871
Anderson, N. P., *1279
Andes, J. E., 1980
Andresen, A. F. R., *537
Andrewes, C. H., 1993
Andrus, P. M., 714
Angelesco, C., 876
Angelini, G., 1813
Ansbacher, S., 137
Anschütz, G., 953
Anselmino, K. J., 879, 879, 1897
Anspach, W. E., 67
Antopol, W., 1261
Apfelbach, G. L., *672
Applebaum, M., 2056, 2056
Arany, G., 1896
Arias Vallejo, E., 146
Armstrong, A. R., 632, 1568
Armstrong, C., *731, 1103
Arnaudo, A. F., 1186
Arneson, A. N., 1890
Arnold, D. P., 446
Arnold, J. G., Jr., 785
Arnold, L., 521
Aron, M., 450
Asami, G., 713
Aujaleu, E., 718
Ault, C. C., *13
Auricchio, L., 1107
Aurin, W., 723
Austoni, B., 2058
Ayman, D., *154, 216
Ayres, S., Jr., *1279

B

Baastrup, S., *956
von Babarczy, M., 635
Babchin, T. S., 955
Bach, K., 1577
Bachmann, W., 1107
Backmund, K., 794
Badger, T. L., *1135
Baer, H. L., *10
Bäumler, O., 1493
Bailey, J. H., *1051
Bailey, P., *562
Bain, C. G., 527
Baker, C. F., 447
Baker, L. S., 633
Balachovski, S., 1574
Balanescu, I., 1744
Balázs, J., 722
Baldenweck, L., 718
Baldwin, J. F., 1981
Balfour, D. C., 1885
Ball, R. P., 448
Bamberger, P., 1267
Banks, H. M., 135
Bao, D. L., 1986
Barach, A. L., 951, *1690
Baraige, 378; (correction) 636
Barbudo, J., 77
Barcroft, J., 1993
Bardenhofer, K. H., 1496
Bardet, P., 144
Barker, H. B., 445
Barker, H. H., 214
Barker, L. P., 1983
Barker, M. H., *244
Barker, P. S., 1805
Barksdale, I. S., 1989
Barnard, L., 1736
Barnaud, 1028
Barnes, A. R., 1097
Barney, J. D., *741
Barnwell, J. B., 1483
Barré, J. A., 1893
Barrett, R. L., *1516
Barringer, E. D., *1825
Barry, M. W., 1570
Barth, E., 1660
Bast, T. H., 69
Battistini, G., 1814
Bauer, C. P., *2026
Bauer, J., 533, 1492
Bauer, R., 1340
Bauke, E. E., 1187
Baum, H. L., 1887
Baumann, T., 1818
Baumgartner, M. M., 141
Baumrucker, G. O., 872
Bayer, L., 1414
Bayer, R., 1661
Bayne-Jones, S., *1769, *1847, *1934
Beard, H. H., *1595, 1980
Beaufays, J., 794
Becker, B. M., 787
Becker, G. H., *342
Beckwith, C., 218
Beebe, L. W., 855
Beecher, H. K., 1989
Beer, A., 880
Beer, E., *181
Behr, C. H., 1108
Behrens, B., 380
Bell, D., 1892
Bellet, S., 1652
Belleville, G., 1814
Benaron, H. B. W., 522
Benham, R. W., 1263
Benjamin, E. L., *808
Benjamin, J. E., *161
Bennett, R. H., 137
Bennholdt-Thomsen, C., 303
Bensley, E. H., 714
Berberian, D., 1985
Bercovitz, Z., 714
Berger, H. C., 290
Bergey, D. H., 523, 871
Bergh, G. S., *1500
Bergman, G., 1031
von Bergmann, G., 1576
Bergstrand, H., 709
Berlin, D. D., 369
Bernabeo, V., 1029
Bernheim-Karrer, J., 1813
Bernstein, A., 525
Berrl, H. D., 1814
Bethell, F. H., *797, *1663
Bianchi, L., 223
Biederman, J. B., *161, 867
Bierman, W., *1354
Bill, A. H., 68
Birnberg, C. H., *1143
Birt, A. R., 373
Bisgard, J. D., *829, 1334
Bjering, T., 149, 149, 956, 1744
Black, B. M., 2055
Black, H. A., 1180
Black, M. H., 1889; (correction) 2058
Blake, W. C., *1441
Blalock, A., *1617
Blanco Otero, M., 719
de Blasi, A., 301
Blatherwick, N. R., *1933
Blatt, M. L., 1889
Blavier, L., 222
Blinov, N., 953
Bliss, E. A., 786, 1985, 1985
Bloch, J. C., 378
Bloom, M. S., *1155
Bloomfield, J. J., 297
Blum, L., 1181
Blumberg, A., 527
Blumberg, H., *1521
Blumenfeld, C. M., 217
Blumgart, H. L., 369, 1805
Boas, G. V., 80
Boas, L., 533
Bodungen, N. F., 455
Böger, A., 1494
Boerner, F., 444
Bogendörfer, L., 1494
Bohler, E., 531
Bohn, S. S., *249
Bojovitch, V., 451
Boldyreff, W. N., 1481
Boles, R. S., *1841
Boller, R., 1187
Boncinelli, U., 1741
Bondi, S., 1495
Bonney, V., 1992
von Bonsdorff, B., 226, 1030
Borchardt, M., 634
Borthwick, G. R., 376
Boshamer, K., 305
Bosworth, O., 872
Botella Llusiá, J., 1032, 1894
Boulin, R., 1658
Bowen, A., 1264
Bowen, B. D., 1737
Bower, A. G., *480
Bowler, J. F., *1750
Bowman, J. E., *1049
Boyd, A. N., *402
Boyd, E. M., 1989
Boyd, R. W., 136
Boyd, W., 1408
Bozsan, E. J., 1655
Braceland, F. J., 292
Brahdy, M. B., *229
Brahmachari, B. B., 529
Brahmachari, P., 75
Brain, R. T., 141
Brain, W. R., 772
Brakemann, O., 878
Brams, W. A., 444
Brand, G. D., 1794
Brav, E. A., 1654
Bray, G. W., 1410
Bredeck, J. F., *827
Brenner, O., 1810
Bressler, J. L., *1298
Brier, A. J., *1704
Brines, R. J., *338
Brschner-Mortensen, K., 1188, 1998
Brooks, B., 1887
Brooks, H., *1192
Broun, G. O., *462
Brown, B. R., 1568
Brown, H. W., *651
Brown, L., 297, *913
Brown, M. S., 1023
Brown, P., 1810
Brown, R., 448
Brown, T. K., 873
Broyles, E. N., *1121
Bruck, E. L., 370
Bruger, M., 71
Brugsch, T., 1031
de Bruin, M., 1806
Brulé, M., 877
Brun, C., 1994
Brunet, W. M., 1651
Brunsting, H., *1999
Bruns, O., 1186
Brunsting, L. A., *1285
Bryan, W. R., *1059
Buchbinder, J. R., 1410
Buddee, F. W., 529
Bueermann, W. H., 135
Bürger, M., 1660
Bugbee, H. G., 1987
Bukovala, A., 636
Bull, P., 1416
Bullowa, J. G. M., 1023
Burch, L. E., 371
Burden, N. J., 1021
Burger, H., 1895
Burghi, S. E., 378
Burgin, L. B., 1024
Burkens, J. C. J., 1998
Burt, K. L., 1101
Burton, E. P., 871
Burton, J. F., *338
Burvill-Holmes, E., 1890
Busse, O., 148
Busson, B., 880, 1108
Butler, C. S., 359
Butterworth, T., 1886
Buvat, J. F., 1185
Buxton, C. L., 1810
Buxton, R. E., 1987
Buzello, A., 1415
Buzolanu, G., 876

C

Caccurl, S., 2058
Cadden, J. F., 783
Cain, E. F., 292
Cailaway, G. D., 286
Calzolari, T., 77
Cameron, D. E., 1653
Cameron, H. C., 867
Camitz, H., 306
Campbell, L. K., 714
Canavan, M. M., 1484
Cannaday, J. E., 1180
Cannady, E. W., *6
Cannon, P. R., 1101
Capani, L., 792
Capelle, W., 634
Cappell, D. F., 715
Caramzulescu, D., 144
Carayannopoulos, G., 877
Carey, T. N., *1521
Carmichael, E. A., 143
Carrié, C., 1815
Carrière, G., 791
Carroll, M. L., 712
Carter, R. B., 1655
Case, A. L., 1985
Casey, A. E., 374, 1097
Cason, J. F., 138
Castex, M. R., 1186
del Castillo, H., 719
Castin, P., 1813
Castle, W. B., *802, 1567
Castleman, B., *1135
Castroviejo, R., 1980
Caulk, J. R., 216
Cecil, R. L., *1583
de Châtel, A., 1577
Chaudhuri, R. N., 299
Chavannaz, J., 451
Chen, K. C., 1411
Cheney, C. O., *1914
Chervyakov, A., 1798
Chesley, A. J., *1145
Chester, W., 867
Chiariello, A. G., 635, 2058
Chieffi, A., 1107
Chiray, M., 791
Chope, H. D., *728
Chopra, R. N., 299, 1027
Chou, S. K., 1411
Christiansen, T., 1818
Christiansen, V., 880
Christie, A. C., *985
Christie, R. V., *384
Christophe, K., *1833
Chu, H. I., 1411
Ciocca, E., 719
Clar, F., 1339
Clark, G., 525, 1099
Clark, J., 1490
Clark, J. H., *1425
Clark, R. B., 868
Clason, S., 724
Claude, H., 952
Cleland, J. B., 1491
Cleminson, F. J., 142
Clere, A., 1492
Clifford, S. H., 1024, *1117
Coates, J. C., 716
Cobb, S., 1484, *1608
Coblentz, W. W., *183, *254, 277
Coca, A. F., *1275
Cochran, H. W., 1024
Coffey, J. M., 213
Coggeshall, H. C., *1608
Coggi, G., 2058
Cohen, I., 786
Cohen, S. S., 1262
Cohn, S., *103
Cold, S., 1818
Cole, L., 1411
Cole, W. H., 294
Coleman, M. B., 213
Collazo, J. A., 77, 451
Collier, F. A., *1753
Collier, W., *822
Colonna, P. C., *2012
Cone, A. J., 947
Connor, J. L., 876
Coombs, H. C., 60
Cooper, D. H., 868
Cope, O. M., 60
Copeland, M. M., 294
Cordeiro Ferreira, 146
Cordier, G., 1185
Corkill, N. L., 716
Cormia, F. E., 785
Cosmulesco, I., 791
Cottet, J., 301
Cotton, F. J., 446
Countryman, C. W., 1738
Courcoux, A., 1029
Courville, C. B., 1097, 1986
Coutard, H., 716
Cowan, A., *1377
Cox, K. E., 524
Cox, W. C., 1988
Cox, W. M., Jr., 633
Cozzutti, G., 953
Craclun, E. C., 144
Cragg, R. W., 1983
Craig, C. F., *1061
Craig, R. H., 1984
Craig, W. M., *1702
Craver, L. F., 294
Creech, C. M., 873
Creelman, M., 1333
Creer, R. B., 1325
Crooke, A. C., 1028
Csapó, I., 534
Cullom, M. M., *1695
Culpepper, A. L., 521
Culver, H., *837
Cumming, H. S., *1705
Curphey, W. C., 528
Curtis, L., 60
Cutler, E. C., 1410
Cutler, J. W., *81
Cutler, M., 632, *1204
Cutting, W. C., 525, *912
Czarski, T. J., 1102

D

Daengsvang, S., 142
Dafoe, A. R., *673
Dahl, B., 536
Dahl-Iversen, E., 1032
Dale, T., 150
Dameshek, W., *802
D'Amour, F. E., 526
Daniel, C., 219
David, J., 877
David, N. A., *474
Davidoff, L. M., 946
Davidson, A. M., 373
Davidson, D. L., 1925
Davidson, S., 97, *480
Davis, A. G., 286
Davis, B. L., Jr., 217
Davis, D., 369, 1805
Davis, J. G., Jr., *559
Davis, L., 1887
Davis, N. C., 947
Davis, P. A., *962; (correction) 1787
Davison, T. C., *1846
Dawidenkow, S., 535
Dawson, M. H., 1986
Day, K. M., 1262
Dean, L. W., *1044
DeCourcy, J. L., 1181
Dedichen, H. G., 150, 150
Dedichen, J., 150, 796
Deegan, J. K., 1180
Delzim, M. E., 226
DeLee, J. B., *307
Demanche, R., 1265
Demurtas, M. P., 145
Denk, W., *17
Dennis, E. W., 1985
DeNormandie, R. L., 1809
De Rényi, G. S., 870
Desjardins, A. U., *1033
de Takáts, G., *1920
Dew, H. R., 1409
Dick, G. F., *1362
Dick, G. H., *1362
Dickens, F., 528
Dickie, L. F. N., 1985
Dickson, W. E. C., 74
Diez Melchor, F., 1265
Dimitracoff, C., 76
Diveley, R. S., *1510
Dixon, C. F., *1605
Dixon, O. J., *1129
Doan, C. A., 1981
Doane, J. C., 1983
Dobreff, M., 302
Dobrzaniecki, W., 876
Dodd, K., 67, 1985
Dodds, E. C., 2057
Dodds, G. S., 867
Dölken, H., 1742
Doepfner, J., 1658
Dold, H., 454

Dolman, C. E., 373, 1487
Donchess, J.C., 711
Donnally, H. H., *1269
Donovan, H., 1810
Doppler, K., 304
Dorne, M., 524
Douglas, B., 1653
Douglas, H. S., 72
Dowling, G. B., 141
Downey, R. A., 446
Downs, T. M., 711
Drach, N., 1109
Dražančić, F., 796
Dreessen, W. C., 297
Dresch, C. A., *16
Drinker, C. K., 370, 1484, 1887
Drosin, L., 1981
Dry, T. J., 375
Dublineau, J., 952
Dubois, A., 1658
Duffy, J. J., 1890
Duke, H. L., 530
Duke-Elder, S., 1027
DuMortier, J. J., 950
Dunbar, J., 1573
Duncan, C. J., 526
Dunlop, H. A., 1105
Dunn, J.S., 299
Dunphy, J. E., 1737
Dutrey, J., 380
Dutton, W. F., 1251
Dworzak, H., 955
Dyes, O., 1495
Dyke, C. G., 946
Dzsinich, A., 1415

E

Earl, C. J. C., 1490
Earle, C. A., *336
Easby, M. H., 868
Eason, J., 1991
Eastwood, C. G., 530
Eaton, M. D., *1769, *1847, *1934
Eaton, P., 1652
Ebergényi, A., 870
Echols, C. M., *1686
Echols, D. H., *2027
Eckardt, F., 147
Eckel, J. L., *662
Eddy, N. B., *1417
Edelmann, F., 1816
Edens, E., 1743
Edmunds, C. W., *1417
Edwards, G. H., 1334
Edwards, P. R., 217
Eggers, H. E., 1888
Ehlers, C. W., 290
Ehrlich, J. C., 293, 783
Eichenberg, H. E., 1744
Einsel, I. H., 1481
Elden, C. A., 1098
Elias, H., 1340
Ellenberg, S. L., 444
Elliott, A. R., 293
Elliott, R. H. E., 1993
Ellis, F. A., 2045
Ellis, L. B., 1335
Ellis, M. M., 289
Elman, R., 294
Elmer, A. W., 80, 869
Elrick, L., 1182
Emerson, H., 1169
Emiliani, C. L., 1995
Engel, P., 722
Engelbach, W., *464
Engerth, G., 1414
English, K. E., *903
Ensign, D. C., 1734
Enuklidze, A., 1798
Epstein, A. A., 507
Equen, M., *1845
Ernstene, A. C., 292, 1261
Erwin, G. S., 715
Eschenbrenner, J. W., *826
Espejo Solá, J., 720
Esserman, A. L., 1889; (correction) 2058
Étienne, G., 378
Etris, S., 523
Eusterman, G. B., 1807
Evans, A. C., *665
Evans, C. E., 446
Evans, E. I., 1333
Evans, H., 1028
Ewell, G. H., 288
Exton, W. G., 1405
Eyger, Y. B., 149

F

Facatselli, 1412
Facatselli, Jr., 1412
Falta, W., 1187
Famé, P., 301
Fantus, B., *25, *108, *183, *411, *484, *749, *832, *915, *990, *1066, *1305, *1375, *1446, *1537, *1853, *1939
Farthing, J. W., 1890
Fasold, H., 534
Fau, R., 952
Faure, F., 450
Faust, E. C., 214
Fauvet, E., 878
Favergiotti, R., 1814
Fay, J. H., 1570
Feagles, H., 527
Feemster, R. F., 1487
Feer, E., 145
Feinberg, S. M., 1725
Feldman, M., 1021, *2007
Felix, A., 951
Fellows, R. M., 1886
Felsen, J., *966, *1055
Feng, C. T., 634
Fenton, R. A., *468
Ferguson, A. B., 1884
Ferguson, J. A., 1487
Fernandez, F., 2058
Fernández Saralegui, A., 1814
Fernan-Nunez, M., *409
Ferretti, G., 1412
Ferris, C. R., *903
Fiala, M. J., 1983
Ficacci, L., 952
Field, M. E., 370, 1887
Figi, F. A., *1434
Fineberg, H. I., 138
Finkelman, I., 1263
Finkelstein, L. O., 791
Finland, M., 1261, 1261, *1681
Fischer, A. E., *240, 1482
Fischer, F., 869
Fischler, F., 1107
Fishberg, A. M., 72
Fishberg, E. H., *1354
Fisher, A. M., 1652
Fisher, B. H., 1556
Fitchett, M. S., 1100
Fitz-Hugh, T., Jr., 1099
Flaxman, N., 1395
Flick, J. B., 786
de Flora, S., 379
Florian, I., 144
Flu, P. C., 536
Földes, E., 1179
Foged, J., 80, 306
Forbes, S. B., *1441
Ford, W. K., *483
Forer, S., 293
Forkner, C. E., 1979
Forman, J., 1484
Formijne, P., 1805
Forrester, C. R. G., 1405
Forschner-Böke, H., 1818
Foulds, G. S., 73
Fowler, C. D., 711
Fowler, E. B., 1335
Fox, C. P., Jr., *748
Fracassi, T., 1492
Fradkin, W. Z., *21
Fraenkel, E. M., 1573
Francis, C., 143
Franck, S., 1268
Frank, L. W., 1180
Frank, R. T., *393, *1210
Franken, H., 1578
Franseen, C. C., 1885
Fraser, A. D., 1990
Fraser, F. R., 143, 1993
Frawley, J. M., *960
Fray, W. W., *810
Freeman, H., 1102, 1568
Freeman, N. E., 448, 2056
Freeman, W., 1485
Frenreisz, S., 381
Frentzel-Beyme, A., 1816
Freund, E., 1482
Freund, H. A., 622
Frey, J., 1815
Fridenberg, P., 430
Friedberg, C. K., 1099
Friedenwald, J., 1021, *2007
Friedfeld, L., 172
Friedheim, L., 1108
Friedman, B., 525, 1099
Friedman, E., 1889; (correction) 2058
Friedman, T. B., *1618
Frisbee, F. C., 2056, 2056
von Frisch, A. V., 1895
Frölich, H. J., 1894
Froes, H. P., 634
Frohman, I. G., 1794
Frola, E., 451
Fromme, A., 1815
Fürst, A., 532

G

Gabriel, W. B., 790
Gabrielli, S., 222
Gadrat, J., 791
Gaeta, A. P., 721
Gage, M., 371
Gaisford, W. F., 1892
Gale, E. D., 875
Gantt, W. H., 430
Gardien, P., 1813
Gardner, E. L., 291
Gardner, F. W., 291
Gardner, L. U., *743
Garis, R. W., 1809
Garland, H. G., 1410
Garrey, W. E., *1059
Gasul, B. M., 1181
Gatellier, J., 1812
Gatta, R., 635
Gaupp, R., 793
Gay, L. N., 1486
Gay, L. P., 287
Geiger, J. C., *342
Geill, T., 226
Gelderman, C. J., 796
Gelfand, H. H., 1486
Gelman, I., 1576
Gerber, I. E., 70
Gershon-Cohen, J., *1841
Géry, L., 1994
Geschickter, C. F., *1212
Gey, G. O., 1886
Ghosh, N. N., 1027
Gibbes, J. H., 140
Gibbon, J. H., Jr., 786
Gibbs, E. L., 868, 947
Gibbs, F. A., 868, 947
Giehm, G., 453
Gifford, S. R., *25, *1537
Gilbert, J. G., 372
Gilbert, R., 213
Gilchrist, E., 299
Gile, J. F., *1750
Gillett, F. H., 1105
Giordano, P., 222
Gironés, L., 953
Glaessner, K., 447
Glassberg, B. Y., 873
Glauner, R., 1575
Glazier, M., 1395
Gleichmann, F., 1267
Gley, P., 301
Goettsch, E., 443
Gohrbandt, E., 1575
Golblin, V., 378; (correction) 636
Goldberg, S. A., 447
Goldberger, M. A., *393, *1210
Golden, J. S., 444
Goldhamer, S. M., *797, *1663
Goldschmidt, W., 148
Goldstein, I., 1025
Goldziéher, M. A., 870
Goliborska, T., 1338
Gomez, D. M., 1412
Goodman, B. A., *335
Goodman, N., *157
Goodman, W. D., 526
Goodwin, T. C., 945, 1889
Gordin, R., 1898
Gorenberg, H., *1055
Górriz, M., 1029
Gosse, A. H., 715
Goudsmit, J., 724
Goyena, J. R., 1742
Grabowski, W., 876
Grace, A. W., 785
Gradle, H. S., *1445
Gradwohl, R. B. H., 288
Graham, E. A., *1497
Graham, H. F., 1982
Grant, L. F., 1888
Grasso, R., 1894
Gray, A. A., 1811
Gray, H. J., 872
Gray, H. K., 1885
Gray, I., 69
Gray, J. P., *342
Gray, M. K., 142
Gray, S. H., *822
Grayzel, D. M., 950
Grayzel, H. G., 1487
Greeley, P. W., 125
Green, A., 1889
Green, H., 1031
Green, J. R., *11, 508
Green, W. T., 1801
Greene, D., *4
Greene, M. R., 218
Greenfield, J. G., 789
Greenfield, S. D., 947
Greenspan, E. B., 1652
Gregg, M. E., 527
de Gregorio, C., 1894
Gregory, P. H., 373
Greig, E. D. W., 716, 1892
Griffey, E. W., 527
Griffin, R. P., 634
Griffith, F. R., Jr., 1737
Griffiths, G. M., 1490
Grignon, C. E., 791
Groen, J., 796
Grönlund, E., 456
Gross, H., 1413
Gross, L., 369, 783, 1099
Gross, M., 379
Gross, R. E., *245
Grosse-Brockhoff, F., 1577
Grotepass, W., 529
Grün, G., 454
Grüneberg, T., 1660
Grütz, O., 793
Grulee, C. G., *735, 1395
Gudjonsson, S. V., 449
Guequierre, J. P., *1693
Guercio, F., 1659
Guerstein, A., 792
Guibor, G. P., *916
Guillaumin, C. O., 1994
Gunn, F. D., 524
Gurevich, T. Z., 1898
Gurewitsch, R., 1495
Gustavson, R. G., 526
Gutman, A. B., *87
Gutzeit, 1494
Gwathmey, J. T., *1536

H

von Haam, E., 521
von Haberer, H., 381
Habützel, C., 1994
Habs, H., 454
Haenisch, F., 1494
Hagemann, J. A., 1556
Hahn, E., 1659
Haining, R. B., 291
Haldeman, K. O., 1334
Hallock, H., *1836
Halpern, L. J., 871
Halpert, B., 73
Ham, A. W., 1337
Hamburger, W. W., 1097
Hamilton, H. B., *829
Hammond, T. E., 298
Handley, R., 1992
Handy, L. M., 293, 1805
Hanke, H., 721
Hannon, R. R., 1411
Hansel, F. K., 137
Hansen, K., 1576
Hanson, A. M., *1425
Hanson, B. S., 1491
Hanson, S., 68
Hantschmann, L., 1897
Happold, F. C., 716
Harbeson, A. E., 373
Harbitz, F., 1416
Hardaway, R. M., 1488
Harding, H. E., 376
Harding, W. G., Jr., 1097
Hare, D. C., 950
Harrington, F. E., *1530
Harrington, S. W., *1702
Harris, A. S., 136
Harris, I., 220, 1490
Harris, M., 526
Harris, R. I., 632
Harrison, T. R., 525, 1099
Hartley, G. A., *251
Hartmann, A. F., *1349
Hartung, E. F., 1884
Hashimoto, T., 1893
Hass, G. M., 947
Hasse, 1494
Hassin, G. B., 293
Hassmann, K., 880, 1817
Hathaway, M. L., 1486
Havlicek, H., 1339
Hawley, C. W., *1375
Hayes, H. T., 1179
Haymaker, W., 1482
Hayman, J. M., Jr., 784
Haynes, H. H., *174
Hazay, L., 1188
Hazen, H. H., *1705
Head, J. R., 949
Healey, F. H., 1184
Hechst, B., 148
Hecht, J. J., 945
Heckmann, K., 223
Helde, E., 1896
Heidelberger, M., 1986
Helfetz, A., 1101
Hellbrunn, J., 1261
Helm, K., *795
Helse, H. A., *739
Held, A., 1108
Heller, S. J., 288
Hellström, J., 1662
Hemenway, R. V., 300
Hempelmann, T. C., *733
Hench, P. S., 1654
Henderson, M. S., 448
Henderson, Y., *750, *834
Hendon, G. A., 1641
Hendry, E. B., 716, 1892
Henkel, M., 79
Henner, R. I., 215, *1767
Henninger, H., 1031
Henry, J. N., *94
Henschen, C., 635
Henske, A. C., 290
Henstell, H. H., 1735
Hepburn, T. N., 446
Herbst, R., 795
Herbst, R. H., 872
Herkel, W., 1993
Herlitzka, L., 76
Herman, K., 795, 1743
Herold, L., 1815
Herraiz, L., 719
Herrera, M., 77
Herrick, J. B., *881
Herrick, R., 372, 1533
Herrick, W. W., *1902
Herrman, W. G., 447
Herrold, R. D., *1821, 1889
Herron, P. H., *735
Hertig, A. T., 292
Herz, L. F., 1888
Herzmann, K., 1817
Heymans van Amstel, H., 80
Heymer, A., 1577
Heynemann, T., 1187
Higgins, C. C., 295
Higgins, H. L., 1024
Hijmans van den Bergh, A. A.: See van den Bergh, A. A. H.
Hill, D. F., 524, 1802
Hill, I. G. W., 369, 1811
Hill, L. W., *331, *1430
Hill, R. M., 220
Hill, T. R., 74
Hills, R. G., 1486
Himmelshach, C. K., *1420
Himwich, H. E., 1735
Hindmarsh, J., 796
Hindse-Nielsen, S., 956
Hinsey, J. C., 217
Hintze, A., 1995
Hippe, H., 793
Hirsh, A. B., 507
Hitzenberger, K., 1414, 1896
Hjort, E., 150
Hobmaier, M., 443
Hoctor, E. F., *13
Högler, F., 795, 1661
Hoevener, 148
Hofbauer, 1893
Hoffman, S. J., 1889
Hoffmann, E., 1742
Hoffmann, F., 879, 879, 1897
Hoffmann, H., 1416
Hofmann, H., 1188
Hofmann, P., 455
Hohenthal, T., 456
Holbrook, W. P., 1802
Holden, F. C., 1169
Holden, M., 217
Hollander, L., 945
Holmes, W. F., Jr., 1263
Holmgren, H., 306
Holst, J., 150
Holst, J. E., 1110
Homans, J., 370, 1887
Homma, H., 1414
Horan, T. N., *325
Horgan, E., 139
Horn, L., 1031
Horn, Z., 721
Horsch, K., 452
Horsley, J. S., 371
Horsley, J. S., Jr., 1183
Horst, K., 1986, 1987
Horton, W. B., 1926
Horwood, M. P., 1101
Hoshiko, N., 1996
Hoskins, R. G., 296, 1568
Hotchkiss, L. D., 622
Housden, L. G., 1265
Hovey, F. B., 1088
Howard, H. W., 72
Howard, L. G., *1833
Howard, M., 1570
Howard, M. E., *1830
Howden, T. L., 288
Howell, K. M., 871
Howie, J. W., 716
Hoyle, C., 2057
Hoyne, A. L., *1051
Hrolv, K., 956
Hubbard, R. S., 1883
Huberman, J., *18
Hudack, S. F., 1569
Hürthle, R., 1413
Hulst, L. A., 453
Humphreys, G. H., 1024
Hunschow, A., 522
Hunt, D. J., 375
Hunter, R. A., 1892
Hurff, J. W., 447
Hurlez, C., 791
Hurst, A. F., 1891
Hurtado, A., *810
Hurxthal, L. M., *391
Huss, R., 306
Hutchison, J. B., 220
Hyams, M. N., 783

I

Iglauer, K., 381
Iimuro, S., 1742
Ikeda, K., 73
Illick, H. E., 945
Illing, 1493
Illingworth, R. E., 220
Iredale, J. L. G., 449
Irons, E. E., *1579, 1732
Irwin, D. A., 948
Isaacs, R., *797, *1663
Isler, L., 224
Israel, L., 1994
Israeloff, H. H., *18
Israëls, M. C. G., 1184
Ito, H., 713
Iversen, P., 149, 1744
Ivy, A. C., 871, *1500

J

Jachia, A., 1024
Jackson, E., *1445
Jackson, L. N., 221
Jacobsen, A. W., 296
Jacobson, C. J., 449
Jacox, H. W., *84
Jadassohn, W., 380

Jalkaran, S. S., 75
Jame, L., 718
James, T. G. I., 143, 1657
Jameson, P. C., 1983
Jamin, F., 794, 795
Jamuni, A., 217
Jankelson, I. R., 945
Jantria, E., 1574
Jeanneret, R., 301
Jeffcoate, T. N. A., 1992
Jellinek, S., 722
Jenkins, R. H., *314
Jenkins, R. L., *403
Jenkins, W. L., 1986
Jensen, J., 287
Jervell, A., 150
Jezer, A., 1097
Jezler, A., 1577
Johannsen, 1494
Johansen, A. H., 149
Johansson, H., 306
Johns, G. A., *13
Johnson, A. S., 219
Johnson, D. W., 1408
Johnson, G., 295
Johnson, G. E., *94
Johnson, G. S., 1887
Johnson, W. M., *1299
Johnsson, V., 1818
Johnston, C. G., 870, *1504, 1852
Johnston, F. D., 369, 1805
Johnston, J. M., 1980
Jones, A. B., *825
Jones, C. K., *914
Jones, E. W., 1490
Jones, H. A., 206
Jones, H. W., *1671
Jones, R. W., 298, 1812
Jones, T. E., *1678
de Jongh, S. E., 536
Joppich, G., 534
Jordan, P. H., *251
Jordan, S. M., *2004
Joslin, E. P., *105
Jost, E. L., 1986
Jude, A., 718
Jürgens, R., 1577
Juler, F., 2057
Jusatz, H. J., 147

K

Kabat, E. A., 1986
Kadrnka, S., 144
Käppeli, A., 76
Kagy, E. S., 214
Kaiser, A. D., *886
Kalbfleisch, H. H., 1895
Kaltreider, N., *810
Kamerling, A. W. C. G., 1496
Kammeier, R. H., 205, 1180
Kanter, A. E., *2026
Kantor, J. L., 632, *2016
Kantrowitz, A. R., 784
Kaplun, E. M., 722, 1110
Karan, A. A., 1824
Karnaky, K. J., 1572
Karnicki, W., 531
Kasabach, H., 1884
Katz, J., 1266
Katz, L., 215, 1097
Katzenelbogen, S., 1102
Kauders, O., 1031
Kavee, J., 1022
Kayne, G. G., 1490
Kazakov, V. I., 382
Keddie, J. A. G., 1573
Keefer, C. S., 787, 1100, 1263
Keeler, C. E., *178
Keesey, W. E., 1486
Kell, H., 1022
Keller, A. E., *478
Keller, H. R., 1268
Kenney, R., 1980
Kenny, F. E., 872
Kerfridin, 952
Kern, R. A., *1293
Kerner, E., 1110
Kernohan, J. W., 709
Kerpel-Fronius, E., 534
Key, J. A., 869
Keyes, E. L., 1085; (correction) 1243
Keynes, G., 141
Kiefer, E. D., *2004
Kienböck, R., 533, 792
Kimball, F. N., *983
Kimball, T. S., 291
Kimura, M., 1996
Kindler, K., 723
King, A. J., 74
King, E. J., 632, 1568
Kinney, F. M., 68
Kinsella, R. A., *462
Kirby, D. B., 633
Kirchgessner, G., 721
Kirklin, R. L., 1885
Kirkman, I. J., 1333
Kirkpatrick, J., 716
Kirwan, E. W. O., 868
Kirwin, T. J., 1987
Kiss, J., 1266
von Kiss, P., 148, 1413
Kitagawa, K., 301
Kjærgaard, H., 1188
Klaften, E., 456, 1992
Klauder, J. V., *236, 1886
Klawans, A. H., *2026
Klein, E., 1576
Klein, L., 951
Kleine, H. L., 873
Kleine, H. O., 1266, 1815
Klemperer, E., 722
Klima, R., 1816
Kline, L. B., 1488
Klinefelter, E. W., *1372
Kling, D. H., 786
Klingenberg, A., 1032
Klingmüller, V., 304
Knight, A. A., *1760
Knott, F. A., 377
Kohler, L. H., *13
Kohlschütter, E., 302
Kolbe, L., 878
Kollath, W., 1896
Koller, O., 723
Kolmer, J. A., 135, 444, 525, 1735
Konjetzny, G. E., 303
Korbsch, R., 954
Kostakow, S., 1266
Kovacs, J., 631, 1803
Kovacs, N., 1108
Krabbe, K. H., 789, 1653
Kral, A., 794
Kramer, B., 1487
Krause, F., 1267
Krebs, M., 1743
Krenn, L., 535
Kretschmer, H. L., *1144
Kretzschmar, H., 1744
Kreyberg, L., 536
Kriech, H., 455
Krieger, V. I., 300
Krikorian, K. S., 1657, 1739
von Krompaszky, T., 1493
Krumbhaar, E. B., 1979
Krumeich, R., 452
Kruse, F. H., *1366
Kruse, F. H., *1944
Kuczarow, M., 147
Kugel, M. A., 369
Kuhns, J. G., 1883
Kukos, A., 534
Kulchar, G. V., 1023
Kulenkampff, D., 532
Kunlin, J., 1658
Kunstadter, R. H., 445
Kurakane, G., 1413
Kurzrok, R., 1333
Kutschera-Aichbergen, H., 225

L

Labbé, M., 718, 1658
Laessing, F., 78
Laidlaw, P. P., 1993
Lakin, C. E., 1574
Lambert, V., 142, 633
Lamborn, W. A., 1573
Landau, A., 1338
Landis, E. M., 1483
Landsteiner, K., *1041
Lane, C. G., *541
Lang, J., 1568
Lange, M., 381
Lanier, L. H., 1653
Laqueur, E., 536
Lassen, H. C. A., 1735
Lassen, H. K., 1735
Laubach, C., 293
Lauda, E., 1743
Laun, R. H., 1896
Launay, C., 531
Laurens, H., *1447
Lawrence, J. S., 291
Lawson, E. H., 445
Lawson, H. A., 1567
Laymon, C. W., *163, 1807
Leach, C. N., 1340
Leake, C. D., 1556
Leake, J. P., *728
Leary, T., *897
Leathers, W. S., *478
Lebsche, M., 795
Le Canuet, R., 791
Lee, F. C., 1736
Lefébvre, R., 1492
Lehmann, P., 1740
Lehrfeld, L., 276
Leibovici, R., 1812
Leibowitz, J., 1893, 2058
Leirl, F., 149
Lenarsky, M., *229
Lennox, W. G., 219, 947
Lenormant, C., 1185
Lenzl, M., 1659
Lepak, J. A., 1102
L'Episcopo, J. B., 710
Leriche, R., 1492, 1658
Lerman, J., 216, 868
Lerner, H. H., 945
Leroux-Robert, J., 144
Le Roy, C. M., 1185
Leventhal, M. L., *668
Levin, G. L. L., 1028
Levin, S. J., 1569
Levine, B. S., 1651
Levine, V., 1485
Levy, J., 1725
Lévy, R., 1492
Levy, R. L., *1690
Lewicki, I., 1338
Lewin, O., 306
Lewis, D., 633, *1212
Lewis, M., 874
Lewis, M. D., 1337
Lhermitte, J., 145
Lian, C., 76, 378; (correction) 636
Liberti, R., 1575
Lichtenstein, M. R., 1022
Lichtenstein, P. M., 218
Lickint, F., 224, 535, 793
Lieber, M. M., 711
von Liebermann, T., 1030
Liebesny, P., 1031
Liebhart, S., 1188
Liebscher, W., 454
Light, A. B., *410
Lillie, R. D., 1103
Linde, P., 796
Lindström, B., 306
Lingenfelter, G. P., 294
Linnell, J. W., 1105
Lino, G., 302
Lion, K., 78
Lissner, H. H., 71
Litschkus, M., 1816
Liu, S. H., 1411
Lloyd, W. K., *559
Llusia, J. B.: See Botella Llusiá, J.
Lockie, L. M., 1883
Löffler, E., 1896
Löhr, W., 954, 955, 1995
Loeper, M., 952
Loeschke, A., 721
Loewenthal, H., 1891
Logan, F. W., *16
Long, P. H., 786, 1985, 1985
Longuet, Y. J., 531
Looney, J. M., 296, 1485
López Vallente, E., 1894
Loupot, P., 378
Lowsley, O. S., *983
Lucchesi, P. F., *1049
Lucklesh, M., 631
Lukens, M., 444
Lumaret, R., 634
Lumb, N., 1892
Lund, C. C., 140
Lundy, C. J., 215
Lutz, A. R., 1489
Lyle, H. H. M., 1982
Lynch, F. W., 372
Lynch, K. M., *1147
Lyon, J. A., 139
Lyter, J. C., 287

M

Maarssø, C., 226
McCandless, H. G., 1990
McCann, W. S., *810
MacCarty, W. C., *957
Macchioro, G., 952
McCloskey, W. D., 786
McColl, C. M., 1734
McCord, W. M., *1595
McCordock, H. A., *822
McCoy, G. W., *1145
McCoy, H. A., 951
McCullagh, E. P., *1140
McEwan, T. L., 221
McGillicuddy, C. J., 873
MacGregor, T. N., 220
MacGuire, D. P., 1989
Machold, K., 225
McIntyre, W. K., 289
McIver, M. A., 1810
McJunkin, F. A., 1983
McKean, A. C., 277
McKelvey, D., 143
Mackenna, F. S., 530
MacKenzie, K. W., 450
Mackey, W. A., *1497
McKie, M., 876
MacKinnon, A. U., 1811
Mackler, H. S., *240
Macklin, M. T., 1892
Maclachlan, W. W. G., 1980
Macleod, A. G., 1805
McLeod, J. W., 716
McLester, J. S., *383
McMaster, P. D., 1569
McMaster, P. E., 70, 786
McMillan, J. C., 1408
MacNeal, W. J., 2056, 2056
McNee, J. W., 715
McNeile, L. G., *548; (correction) 846
Macy, I. G., 522
Madden, B., 444
Maechling, E. H., 1885
Maeda, K., 75
Magath, T. B., *1218
Magitot, A., 1658
Mahoney, E. B., 291
Maisel, J. J., *1930
Major, R. C., 135
Malkowa-Riabowa, 1661
Maloney, H. P., *1618
Mandelstamm, A., 722
Mann, F. C., 71
Mantz, H. L., 289
Marañón, G., 451
Marble, A., 1102
Marcotte, A., 791
Marelli, F. L., 1492
Margolis, J., *1933
Markee, J. E., 217
Markle, P., 215
Markson, M., 1338
Marquardt, F., 1187
Martin, C. L., 788
Martin, F. M., *472
Martin, J. D., Jr., 711
Martin, L., 712
Martínez, P., 1029
Marting, F. L., 73
Martland, H. S., *643, 1807
Mastin, E. V., 289
Matheson, N. M., 143, 1657
Matinler, 450
Matovetskiy, I. I., 1268
Matsuoka, H., 221
Matthews, B. H. C., 1993
Matti, H., 718
Mattson, H., *409
Matzger, E., *253
Maugeri, S., 302
Mauriac, P., 1106
Maxwell, J. H., *2027
Mayo, J. G., 1807
Mead, C. H., 786
Meakins, J. C., *384, *1442
Means, J. H., 868
Medvel, C. V., 1030
Meek, W. J., 525
Meersseman, F., 634
Melnicke, E., 303
Meister, H., 2058
Melchior, E., 953, 1109
Meleney, H. E., *1213
Memmesheimer, A. M., 1996
Mencky, W. J., 1983
Mendelsohn, H. V., 372
Menees, T. O., 1988
Merkel, W. C., 1809
Merklen, F. P., 76
Merklen, P., 1994
Merson, F. S., 791
von Mettenheim, H., 1108
von Meyenburg, H., 531
Meyer, H. E., 1030
Meyer, K. A., 784
Meyer, O. O., 71
Meyer, R., 378
Michelson, H. E., *163, 372
Mikawa, T., 221
Mikkelsen, O., 1662
von Mikulicz-Radecki, F., 456, 1662
Mikulowski, V., 1186
Miller, D. K., *387
Miller, J. D., 1988
Miller, J. R., 1182
Miller, J. W., *907
Millico, J. S., *251
Milliman, M., 855
Milner, J. G., 1657
Miltner, L. J., 950
Minot, A. S., 67, 1985
Minot, G. R., 1021
Mintz, E. R., *741
Misske, B., 453, 879
Mitchell, A. G., 445
Mitchell, H., 1556
Möbius, W., 1660
Møllgaard, H., 382
Mönch, G., 381
Moersch, F. P., *1196
Moffat, D., *318
Molander, C. O., *1767
Molesworth, E. H., 717
Molsberry, J. M., *892
Moltke, O., 1744
Mommsen, H., 1578, 1743
Monaghan, B., 136
Moncrieff, A., 1740
Monfort, J. A., 291
Monguió, J., 1267
Monkhouse, J. P., 142
Monson, L. P., 69
Montagnini, L., 720
Montañés, P., 77
Montgomery, L. G., 524
Moore, A. T., 1738
Moore, J. M., 1334
Moore, M. T., 293
Moore, R. L., 1024
Moore, T., 950
Morgan, J. R. E., 1888
Morgenstern, M., 712
Morleont, L., 1185
Moritz, A. R., 784
Morley, A. S., 1027
Morrison, G. M., 446
Morrison, P. J., *1504
Morrison, W. A., 375
Morrow, M. B., 1571
Mosenthal, H. O., 71
Moss, F. K., 631
Motlka, J., 1577
Motzfeldt, K., 1032
Mouat, T. B., 376
Mouquin, M., 301, 1028
Muckenfuss, R. S., *731
Müller, H. P., 723
Mukerji, A. K., 1027
Mull, J. W., 68
Muller, G. L., 1025
Mulvey, B. E., 1261
Mumme, C., 635
Murdock, T. P., 1487
Murphy, D. P., 870
Murtagh, B. L. S., 1810
Musser, J. H., 286, *725
Musson, E. K., *728
Mutch, N., 139, 1104
Myers, G. N., 449
Myers, J. A., *1299, *1530
Myers, V. C., 1481
Myers, W. K., 787, 1100, 1263
Myerson, M. C., 372
Mysel, P., *1036

N

Nachlas, I. W., *323
Nadler, J. E., 631
Nadler, S. B., 1985
Nadler, W. H., 524
Naegeli-Akerblad, H., 1031
Naeslund, J., 724
Nagata, S., 75
Nagel, R., 1108
Nagy, G., 1897
Nakagawa, S., 1742
Nakahori, K., 790
Nason, L. H., 1736
Nathan, D., 293
Nathanson, I. T., 528
Naujoks, H., 1416
Neal, J. B., *726
Neal, M. P., 289
Necheles, H., *107
Nemenow, M., 1495
Nesbit, O. B., 523
Neuber, E., 305
Neuda, P., 1743
Neufeld, L., 146, 1186
Neumann, H., 147
Neurath, R., 1578
Neuweiler, W., 1816
New, G. B., *1434
Newburgh, L. H., 1981
Newell, C. E., 1104
Newhart, H., 1262
Nicastro, M., 222
Nichols, B. H., 946
Nichols, S., 1809
Nicholson, M. M., *1269
Nico, F., 302
Nicolaysen, K., 150
Niebuhr, W. A., *16
Nielsen, J. M., 1986
Nisbet, O. M., 527
Nissen, N. I., 956
Noble, R. L., 2057
Noel, R., 1994
Noetzel, W., 1660
Noordhoek Hegt, W. F., 1496
Nordholz, W. C., 1641
Norris, J. C., *1846
Nublola, P., 1338
von Numers, C., 1416
Nunn, J. A., *472

O

Oastler, E. G., 299
Ober, F. R., 1801
O'Brien, C. S., *892
Odinet, J., 76
Oertel, 1744
Östling, K., 1662
O'Hare, J. P., *6, *1373
Ohligmacher, 1030
Ohlsen, A. S., 1744
Ohly, A., 302
O'Leary, P. A., 441
Olesen, M., 1818
Oliver, R. L., 135
Olmsad, M., 1986
Opsahl, R., 880
Orr, J. W., 74
Orr, T. G., 528, 710
Osgood, E. E., 714
Osofsky, A. S., *966
Osterberg, A. E., 709
Ottow, B., 1661
Overholt, R. H., 784
Owings, J. C., 1886

P

Pagel, W., 717
Pagni, B., 877
Pagniez, P., 145
Pahl, J., 1661
Paillov, V. G., 1268
Palmer, H. P., 292
Palmer, L. S., 1408
di Paola, N., 877
Pappenheimer, A. M., 1885

Pardee, H. E. B., *1899
Pardo-Castello, V., 206
Parini, A., 1338
Parker, D. M., *244
Parker, F., Jr., 1100
Parker, H. M., 1810
Parker, H. M. (Kansas City, Mo.), *903
Parkins, L. E., *545
Parkinson, J., 2057
Parmley, V., 1406
Parsons, W. B., *87
Paskind, H. A., *100, 785
Patek, A. J., Jr., 1021
Paterson, A. S., 377
Paterson, R., 1810
Patterson, R. F., 713; (correction) 956
Paul, L. W., *24
Pavel, I., 144
Payne, G. C., 1567
Payne, W. W., 1265
Peacock, P. R., 74
Pearce, L., 371
Pearson, R. S. B., 377
Peel, A. A. F., 1991
Peer, L. A., 442
Péhu, M., 1994
Peiler, S., 1416
Pelouze, P. S., *1819
Pemberton, J. deJ., 371, 1026, 1982
Pemberton, R., 1481, 1803
Penberthy, G. C., 1807
Perkin, H. J., 1568
Permar, H. H., 1980
Perry, C. B., 1990
Petrás, P., 225
Petzelt, G., 1577
Pezharskaya, V. V., 382
Pfeiffer, G. E., 1889
Pflaumer, E., 381
Playd, F. F., 1898
Pierce, W. F., *830, 1395
Pieri, G., 877
Pilcher, J. D., 1808
Pilcher, L. S., Jr., 784
Pincus, G., *105
Pisk, G., 454
Pitt, R. M., 951
Plum, P., 80, 1268
Poe, J. G., 430
Pöch, G., 1340
Pogibko, N. I., 1340
Polenov, A. L., 955
Pollak, W., 1496
Pollard, H. M., 1483
Polowe, D., 2056
Poncher, H. G., 1181
Popchristoff, P., 1265
Poppen, J. L., *391
Poston, R. I., 875
Poth, E. J., 1023
Pottenger, F. M., *1907
Potter, A. L., 1992
Potter, E. B., *1753
Poullquen, E., 1574
Pratt, G. H., *983
Prehn, D. T., 872
Prescott, J. W., *157
Price, A. S., 1571
Price, I. N. O., 74
Price, L. W., 1567
Priestley, D. F., 716
Prince, H. E., 1571
Prinzmetal, M., 712
Prommas, C., 142
von Puky, P., 1816
Purjesz, B., 453
Purper, F. G., 304
Putnam, T. J., 526, 1889
Pyles, F. P., 431

R

Rabboni, F., 532
Rachmann, W. I., 80
Radvan, I., 144
Rainey, W. R., 136
Raisz, D., 1188
Raili, E. P., 1023
Ralph, N., 508
Ramel, E., 1994
Randall, A., 1407
Randolph, H., *560
Rappaport, B. Z., 1486
Rasmussen, A. A., 636
Rathery, F., 791
Ratnayeke, M., 1105
Rattner, H., *180
Ravdin, I. S., 870, *1504
Rawls, W. B., 370
Rech, W., 1493
Rector, J. M., 873
Reed, A. C., 214, 214, *1224 (correction) 1547
Reed, C. I., 1486
Reeves, E. B., 443
Reh, T., 145
Rehfuss, M. E., *1600
Reichert, F. L., 370
Reid, C., 529
Reid, P. E., 871
Reifenstein, E. C., *1668
Relles, M., 531
Reiner, M., 1484
Reinwein, H., 1576
Remzi, T., 1416
Renner, C., 1895
Rennie, J. B., 1991
Renshaw, J. F., *1140
Resnik, H., 1099
Resnitzky, A. L., 532
Reydermann, I., 792
Reynolds, R. J., 789
Rhoads, C. P., *387, 1567
Ribadeau-Dumas, L., 1028
Ribet, M., 301
Rich, C. O., *829
Richards, D. W., Jr., 951
Richards, G.E., 1570
Richardson, R., 1985
Richter, C. E., 135
Riddle, P., 874
Riebeling, C., 1817
Riedmüller, L., 380
Riegel, C., *1504
Rienhoff, W. F. Jr., 633, *1121
Rinkel, H.J., 287
Riseman, J. E. F., 1805, 1979
Ritchie, E. B., 372
Rivers, T. M., 870
Robards, E. M., 1656
Roberts, N. W., 790
Robertson, E. B., 1027
Robertson, H. F., *236
Robins, L. S., 445
Robinson, H. M., 1656
Robinson, W. D., 1986, 1987
Robson, J. M., 220
Roehm, H. R., 445
Roesler, H., 868
Rœvig, G., 536
Rogers, J. M., 714
Rogin, J. R., 73
Rogoff, J. M., *1764
Rohland, L., 1818
Roller, C. S., *671
Rombold, C., 1655
Rona, M., 447
Rones, B., *327
Roome, N.W., 786
Roop, W. O., 788
Roos, A. J., 633
Root, H. F., *482
Rosahn, P. D., 374, 374
Rosanoff, A. J., 293, 1805
Rosanoff, I. A., 293
Rose, A. R., 1405
Rosegger, H., 1816
Rosenak, S., 722
Rosenbaum, A., 631
Rosenberg, W. A., 1262
Rosenblatt, M. B., 441
Rosenbusch, H., 1740
Rosenow, E. C., 217
Rosenthal, F., 1108
Rosh, R., 946
Ross, E., 785
Ross, F. E., *563
Ross, L. I., 521
Ross, N., 875
Ross, V., 1408
Rost, 77
Rothlin, E., 1267
Rothschild, M. A., 369
Rousseau, G., 1106
Routier, D., 876
Row, H., 1263
Rowntree, L.G., *1425
Rubegni, R., 451
Rubin, E. L., 220
Rubin, H. W., 372
Rubinstein, 718
Ruch, W. A., 68
Rucker, M. P., 1572
Rudsit, K., 795
Rueda, P., 1812
Ruelle, G., 144
Ruhnau, A., 452
Ruiz Gijon, J., 1413
Rule, A. M., 444, 525, 1735
Rundlett, E. V., *1055
Runyeon, F. G., *1199
Rupilius, K., 302, 1338, 1412
Russell, D. S., 1028
Russell, H. K., 69
Russell, R. L., 527
Russum, B. C., *1700
Ryerson, C. S., 70
Ryerson, E. W., *562
Rynearson, E. H., 1026, *1196
Rypins, E. L., 213
Rytand, D. A., 370, 525

S

Saamer, E., 147
Sackey, M. S., 870
Safár, K., 442
St. Jacques, E., 948
Saito, M., 1981
Salkin, D., 1483
Salleras, J., 1814
Salmon, A., 1106
Salmon, U. J., 1098, *1210
Salter, W. T., 216, 1889
Saltzstein, H. C., *242
Salzman, S. R., *483
Sampson, H. L., *913
Sander, P. G. H., 1337
Sándor, S., 721
Sanes, S., 70, 872
Sanford, A. H., *1705
Sanford, H. N., *735, 2046
Saphir, W., *668
Saralegui, J. A., 1022
Satanowsky, S., 1814
Satoh, T., 303
Sauerbruch, 1995
Saunders, J. M., 1985
Sauphar, G., 222
Savagnone, L., 222
Sawyer, H. P., 1488
Sayers, R. R., *907
Scarpellino, L. A., *903
Schaaf, F., 380
Schade, H., 1660
Schaefer, R. L., *464
Scharff, O., 225
Schechter, S., 632
Schecter, A., 1652
Schedtler, O., 455
Scheer, M., 1052
Scheffer, L., 1994
Scheman, L., *107
Schenck, H. P., *1293
Schepetinsky, A., 304
Scheps, M., 80
Scherb, R., 1813
Scherf, D., 454, 1496, 1743
Schiff, L., *1924, 2055
Schildknecht, O., 1414
Schiller, W., 1980
Schilling, W., 452
Schindel, L., 1660
Schlodt, E., 1898
Schläpfer, H., 878
Schlittler, E., 531
Schlossberger, H., 452
Schmid, W., 380
Schmidt, E. R., *975
Schmiedeberg, H., 535
Schmitz, H., *808, 1333
Schnabel, P., 1743
Schneider, M. (Chicago), 1889
Schneider, M. (Göttingen), 1815
Schneiderbaur, A., 1895
Schneyer, J., 224
Schnohr, E., 724
Schoeller, W., 147
Schoenberg, M. J., 72
Schörcher, F., 146
Scholtz, H. G., 879
Schreus, H. T., 1339
Schröder, H., 1494
Schube, P. G., 1888
Schuberth, K., 148
Schuck, C., 374, 375
Schüle, F., 1815
Schürer-Waldheim, F., 1575
Schultzer, P., 1998
Schultze-Rhonhof, F., 1492, 1493
Schuman, W., 1651
Schur, M., 1997
Schutz, W. J., 1097
Schwab, R., 79
Schwalm, H., 148
Schwanen, H., 455
Schwartz, D. K., 1988
Schwartz, E., 137
Schwartz, S. P., 867, 1097
Schwarz, H. G., 720
Schwarzmann, J. S., 1578
Schwebel, R., 723
Schwentker, F. F., 870, 1889
Scott, T. F. M., 1261
Scowen, E. F., 2057
Seuderi, G. S., *672
Scull, C. W., 1805
Sebba, M., 794
Sedwick, H. J., 1021
Seevers, M. H., 525
Seitz, L. (Frankfurt a.M.), 1997
Seitz, L. (Heidelberg), 454
Selle, W. A., 1571
Senear, F. E., *1705
Senior, B., *1924
Serefis, S., 954
Shane, J. H., 526
Shannon, W. R., 1482
Shapiro, H., 530
Shapiro, M., *480
Sharlit, H., 125
Sharpe, J. C., 1486
Shattuck, G. C., *1376
Shaw, A. F. B., 299
Sheard, C., 73
Sheffield, H. B., 1968
Shellhorn, B. L., 218
Shellow, R., 1654; (correction) 1898
Sherman, I., 870
Shibley, G. S., *2021
Shiflett, E. L., 946
Short, J. T., 295
Showalter, A. M., *559
Shutt, W. J., 220
Shwartzman, G., 2055
Sidel, N., *254
Siedentopf, H., 224, 1031
Siegert, F., 1997
Siegl, J., 1109
Sillberberg, M., 1740
Silltzbach, L. E., 441
Silver, S., *1058, 1484
Simill, A., 1995
Simon, E., 442
Simon, S. K., *1063
Simpson, F. E., 1026
Simpson, F. P., 1989
Simpson, W. M., *1705
Singh, H., *1931
Sippe, C., 377
Siwe, S., 1998
Skipp, W. M., 1569
Skorpil, F., 532
Skou, B., 1794
Sladen, F. J., 1734
Slavin, P., 441
Slemons, J. M., 68
Slotkin, H. B., 1488
Sly, G. E., 1737
Small, L. F., *1417
Smart, M., 1891
Smilovits, N., 1413
Smith, D. T., *971
Smith, E., 138
Smith, E. R., 2057
Smith, F. R., 1567
Smith, G. F. R., 1184
Smith, H. A., *1376
Smith, J., 1991
Smith, L. H., *1111
Smith, M. I., 2045
Smith, P. L., 1988
Smith, W. (London), 1993
Smith, W. (Springfield, Mo.), 286
Smithwick, R. H., 2056
Snell, A. C., *1445
Snodgrass, T. J., 1104
de Snoo, K., 1493
Snow, W., *831
Snyder, M., 292
Sokol, A. A., 622
Sole, A., 305
Solomon, C. I., 1487
Sommer, S., 879, 1997
di Sorrentino, A. P., 877
Soskin, S., 215, *1767
Soule, S. D., 873
Souttar, H. S., 449
Spence, A. W., 2057
Spickmann, F., 226
Spielman, P., *393
Spies, J. W., 300
Spies, T. D., 1264, *2021
Spillman, R., 1010
Spitzer, W., 1110
Spitzy, H., 148
Spivack, J. L., 784
Spreng, A., 1659
Stahel, W., 1813
Stalmann, A., 305
Stanbury, W. S., 215
Stanca, C., 1897
Stander, H. J., 783
Stanojević, L., 1897
Starcke, P., 1109
Stark, G., 224
Starkey, D. H., 632
Starr, A., 1736
Steen, R. E., 1657
Steere, N., 220
Steffanutti, P., 1574
Stegeman, W., 712
Steigerwald, E., 712
Steinberg, A., *1425
Steindler, A., 1732
Steiner, F., 1897
Steiner, K., 1415
Steiner, P. E., 443
Stephenson, E., *21
Stern, B., 1979
Stern, J. E., *831
Stevens, H., 376
Stewart, C. A., *176, 1336
Stewart, D., 142
Stewart, H. L., 711
Stewart, M. A., *402
Stewart, R. L., 786
Stewart, W. B., 1735
Stewart, W. H., 945
Stieglitz, E. J., *1760
Stieren, E., *311
Stillman, E. G., 218
Stivelman, B. P., 523
Stockton, A. B., *912
Stöckl, E., 79, 1997
Stokes, J. H., 431
Stolle, F., 225
Stone, C. H., *1933
Stone, C. T., *151
Stone, H. B., 1886
Stone, L., 1264
Stookey, P. F., *903
Stott, L. B., 717
Strauss, A., *182
Strauss, M. B., *1
Strauss, M. J., *1830
Strecker, E. A., 292
Stringham, J. A., 300
Stroganoff, W., 1104
Stroud, C. M., *1421
Strouse, S., *1767
Struck, H. C., 1486
Stuart, G., 1657, 1739
Stubblefield, H. I., 871
Stude, W. C., 296
Sturgis, C. C., *797, *1663
Sturgis, S. H., 140
Stutsman, D. B., 288
Sullivan, J., *1055
Sullivan, J. A., 1984
Sullivan, S. J., *337
Sulzberger, M. B., 1489
Sundaram, S. K., 60
Sunder-Plassmann, P., 1338
Supplee, G. C., 137
Sutton, L. E., Jr., 1183
Sutton, L. P., 872
Sutton, R. L., Jr., 1023, 1325
Suzuki, S., 1742
Svensgaard, E., 1744
Swab, C. M., 290, 1485
Swalm, L. T., *1589
Swanish, P. T., 1798
Sweeney, J. S., *234
Swenson, P. C., *87
Swift, H. F., 949
Sylla, A., 453
Symons, P. H., 1993
Szász, A. von S., 305
Székács, A., 878
Szekely, J., 302
Szold, E., 1496

T

Tahl, T., 2055
Talnter, M. L., 138, 525
Takahashi, R., 1996
Talaat, M., 1993
Talalov, J. Z., 1807
Tallerman, K. H., 449
Tamis, A. B., 783
Tamura, J. T., *408
Tate, H., 1656
Taub, S. J., *334
Taylor, A., 305
Taylor, F. W., 1485
Taylor, G. D., 1884
Taylor, G. W., 1885
Teneff, S., 719
Terry, L. L., *1036
Tesdal, M., 1032
Tevell, Z., 146
Thaysen, T. E. H., 1744, 1998
Theodore, F. H., *181
Thewlis, E. W., 71
Thiel, K., 452
Thiele, G., 1895
Thomas, M. L., 1657
Thompson, P. K., 1985
Thompson, R., 871
Thompson, S., 523
Thompson, W. E., 1657
Thompson, W. G., 1985
Thomson, D., 298
Thomson, J. E. M., 1181
Thomson, J. G., 1573
Thomson, R., 298
Thomson, W. A. R., 1991
Thorek, *1610
Thorlakson, P. H. T., 1408
Thorson, J. A., *1438
Tibbets, A. P., 139
Till, A. T., 377
Timberlake, G., 360
Tobias, J. J., 507
Tocantins, L. M., *1671
Todd, E. W., 1739
Török, G., 146, 1186, 1414
Tompsett, S. L., 299
Topa, 144
Torkildsen, A., 875
Toumey, J. W., Jr., *1836
Touroff, A. S. W., 711
Touw, J. F., 1496
Toverud, K. U., 536
Tovey, D. W., 522
Traissac, M., 1106
Treiger, L., 215
Treusch, A., 955
Trillat, P., 1994
Tripoli, C. J., *1595, 1980
Trolow, 1661
Trumble, H. C., 1265
Tsen, E. T. H., 530
Tsuchiya, J., 713
Tuchman, L., 1261
Tucker, H. E., 522
Tucker, R. B., 297
Tucker, G., *1440
Turkeltaub, S. M., 1406
Turpin, R., 1994
Tweedy, W. R., 1983

U

Ude, H., 534
Uehlinger, E., 878
Ugelli, L., 1185
Uhlmann, E., 78
Ulberrak, K., 1187
Unger, A., 452
Urban, H., 1661

V

Vaccarezza, R. F., 379
van Antwerp, L. D., 1806
Van Bogaert, A., 876
Vance, B. M., 1806
Van de Erve, J. M., 372
van den Bergh, A. A. H., 529, 1496
Vandevere, W. E., 442
van Emde Boas, G.: See Boas, G. V.
Van Haelst, J., 792
Van Liere, E. J., 1179
van Muijden, N. H., 454
Van Rooyen, C. E., 716, 1892
Van Winkle, C. C., 1262
Vaquez, H., 301, 1028
Vaughn, J. O., 138
Vedder, A., 1806
Végh, J., 1897
Vehrs, G. R., 1336
Velikanov, I. M., 382
Vener, H. I., *480
Véraln, M., 378
Vercesi, C., 1659
Vermel, S. S., 79
Versari, A., 1029
Victor, G., 1486
Vidgoff, B., *1767
Viets, H. R., 1264
Viko, L. E., *553
Villaret, M., 1812
Villey-Desmeserets, G., 1185
Virgilio, F., 1741
Vishnevskiy, A. V., 149
Voegeli, A., 379
Vogt, E., 78, 1495, 1578
Voke, E. L., 1890
Volavsek, W., 1109
Vonderlehr, R. A., *1705
Von Glahn, W. C., 1885
Vorwald, A. J., 1024

W

Wagener, H. P., *1910
Wahl, F. A., 223, 795
Wainwright, C. W., *1357, 1733
Wakeley, C. P. G., 143
Wakerlin, G. E., 785
Walcott, C. F., 1985
Waldenström, H., 636
Walker, A. A., *227
Walker, I. C., 1099
Wallgren, A., *1341
Walsh, J., 1010
Walters, W., *1345
Walther, O., 223
Walton, R. P., 445
Wang, S. H., 1411
Ward, G. E., 294
Ward, W., 1169
Warkany, J., 445
Warren, C. R., *410
Warren, J. W., 527
Warren, S., 711
Warren, S. H., 449
Warwick, H. L., 788
Wassel, G., *244
Waters, R. M., *975
Watson, B. P., *1745
Watson, E. A., *1700
Watts, J. W., 1264
Weaver, G. H., 1968
Weber, H., 1815
Weber, J., *107
Webster, L. T., *731
Wechsler, R. B., 378
Weddell, A. G., 875
Weech, A. A., 443
Wegelin, C., 636
Weichert, C. K., 136
Weidman, F. D., 1100, *1693
Weigmann, F., 454
Weiler, E. S., 1107
Weill-Hallé, B., 1490
Weinberg, E. D., 294
Weingrow, S. M., 787
Weinstein, A. A., 369, 1805
Weinstein, J., 441
Weinzirl, J., 441
Weis, M. W., *13
Weiser, R. S., 441
Weiss, A., 1812
Weiss, E., 521
Weiss, S., 1335
Welch, H., 1487
Weller, C. N., 1807
Wellmann, M., 303
Welsh, A. L., 1982
Welsh, A. M., 1811
Wendlberger, J., 1109
Wenner, W. F., 947
Wermer, P., 1030
Werner, A., 1996
Werner, A. A., *13
West, T. J., 125
Westwater, J. S., 1491
Wetherford, H. L., 1883
Wexler, D., 1023
Wheatley, B., 716
Wheeldon, T., 442
Wheeler, G. A., 375
Wheeler, W. E., 873
Whigham, J. R. M., 951
Whitby, L. E. H., 1740
White, C., *1277, *1376
White, H. L., 136
White, J. C., 2056
White, P., *105
White, P. D., *1135
White, L. E., 1488
Wick, S., 1263
Wiener, J. J., 1022
Wiener, R. von E., 633
Wilbur, D. L., 1100
Wilcox, C., 1023
Wildbolz, H., 636, 719
Wile, U. J., *648
Wilhelm, M. M., 714
Wilhelmi, O. J., 288
Wilkie, D. P. D., 143
Wilkinson, J. F., 951, 1184
Williams, J. W., 788
Willis, R. A., 1337
Willoquet, P., 791
Wilson, F. N., 369, 1805
Wilson, G. S., 1992
Wilson, R. H., 300
Wilson, W. M., 1025
Windsberg, E., 1571
Winkelman, N. W., *662
Winkelstein, A., 2055
Winkler, A. W., 1261
Winter, E. W., 1030
Winternitz, M., 369
Wise, F., 1489
Wiseman, B. K., *1524, 1981
Wiseman, J. L., 1407
Withers, O. R., 290
Witts, L. J., 1812
Wolf, H. J., 723, 723
Wolfe, J. J., 950
Wolfson, W. L., 1406
Woltman, H. W., *457, *1930
Wood, C. B., 1410
Wood, H. G., *815
Worms, G., 144
Wozasek, O., 1340
Wright, D. O., 286
Wright, H. D., 1739, 1739
Wright, I. S., *318
Wright, R. D., 221
Wu, P. P. T., 71
Wydrin, A., 1495
Wyeth, G. A., 772

Y

Yant, W. P., *907
Yardumian, K., 868
Yde, A., 1818
Yenikomshian, H. A., *660
Yonkman, F. F., *1931
Young, A., 784
Young, H. H., 1086, 1655

Z

Zabin, A., 507
Zanardi, F., 1741
Zanetti, S., 451
Zappalà, G., 720
Zeckwer, I. T., 1484
Zeisler, E. P., 524
Zeltter, P., 1267
Zellkson, A. A., 955
Zentay, P. J., *827
Zia, L. S., 1979
Ziballs, S., 1185
Zimmermann, I., 1416
Zinninger, M. M., 1990
Zitzke, E., 787
Zolezzi, G., 145
Zollinger, R., *245, 1737
Zorn, R., 1265

INDEX TO PAGES

OF THE JOURNAL, ACCORDING TO WEEKLY ISSUES—VOLUME 103, JULY-DECEMBER, 1934

Pages	No.	Date	Pages	No.	Date	Pages	No.	Date	Pages	No.	Date
1— 80	1	July 7	537— 636	8	Aug. 25	1111—1188	15	Oct. 13	1579—1662	21	Nov. 24
81— 150	2	July 14	637— 724	9	Sept. 1	1189—1268	16	Oct. 20	1663—1744	22	Dec. 1
151— 226	3	July 21	725— 796	10	Sept. 8	1269—1340	17	Oct. 27	1745—1818	23	Dec. 8
227— 306	4	July 28	797— 880	11	Sept. 15	1341—1416	18	Nov. 3	1819—1898	24	Dec. 15
307— 382	5	Aug. 4	881— 956	12	Sept. 22	1417—1496	19	Nov. 10	1899—1998	25	Dec. 22
383— 456	6	Aug. 11	957—1032	13	Sept. 29	1497—1578	20	Nov. 17	1999—2112	26	Dec. 29
457— 536	7	Aug. 18	1033—1110	14	Oct. 6						